



## **PROJECT REPORT**

**ON**

**CAMPUS TRACKER**

**BY**

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## **Introduction/Aims and Objective :**

The World Health Organization defines **Dentistry** as "the science and art of preventing, diagnosing and treating diseases, injuries and malformations of the teeth, jaws and mouth".

**Dentists** diagnose and treat problems with teeth and tissues in the mouth, along with giving advice and administering care to help prevent future problems.

They provide instruction on **brushing**, **flossing**, the use of **fluorides**, and other aspects of dental care. They remove **tooth decay**, **fill cavities**, **examine X rays**, place protective plastic sealants on children's teeth, **straighten teeth**, and repair **fractured teeth**. They also perform **corrective surgery** on gums and supporting bones to treat gum diseases.

Dentists extract teeth and make models and measurements for dentures to replace missing teeth. They also administer anesthetics and write prescriptions for antibiotics and other medications.

Dental health centre's are important because they provide crucial services to the society, so it is necessary to automate their work process in order to enhance the quality of their service.

Since most of our dental clinics work manual system, and it is very hard to keep track the health situation of the patients in an order manner with time to time.

At that time it is worthwhile to make a database system that safe and keep track the information of the patients as well as simplify their work up to extent.

The other reason why it is important for dental clinics to have a database system is that patients with dental problems might take long time to cure and visits their doctors/consultants more than one time, so the dentist have to follow up their treatment history properly to provide the best treatment type.

## ■ **System Analysis**

### **Introduction**

System analysis is a logical process; the objective of this phase is not actually to solve the problem but to determine what must be done to solve the problem. The basic objective of the analysis stage is to develop the logical model of the system

### **Existing system :**

- Patients are registered

To register a patient, the patient must be 15 years old or above or there should someone else responsible for him. Patient should have related complaint about oral health

- Schedule appointment for the registered patients

After patient is registered nurse/staff should set and tell the patient, date and time that the patient can meet with the dentist for diagnosis and treatment.

- Complaints

After nurse set the appointment date, patient meets with the dentist and tells complaint that he/she have.

- Patient diagnosis

At this stage, dentist already captured the chief complaint of the patient and will take the proper action we call this (diagnosis process).

- Patient treatment

After diagnose result is known by both dentist and patient, then dentist will provide appropriate treatment based on patient's condition

## **Problems with the current system**

### **1. Time-consuming** data entry and information retrieval

Dental Clinic & Pharmacy face a vast difficulty and inefficient work from registering patients, searching old records of the patients, setting appointments, and keeping track patient information.

### **2. No treatment history**

In case a patient need more than one time visit; the patient is treated as new patient even if it is the second visit for that patient, the only difference between new and the existing patients is the doctor's prescription of the patient in which, if it is lost the patient will be unable to meet the dentist again unless he/she register again as a new patient.

### **3. Data loss**

Data that is written in their operation books can easily be lost which slow down the reputation of the clinic.

### **4. Searching** if information of a patient is misplaced, then searching for it is difficult, as it will cause patient disappointment.

### **5. Lack of proper appointment schedule** of dentist and patient

## **Proposed System**

Dental Clinic & Pharmacy has one manager which is at the same time the owner. The clinic has one dentist and two staff which are responsible for patient registration, and giving prescribed drugs to the patients.

So this system is going to be used in a small network (client- server based) in which the dentist himself is the administrator of the database and responsible who is accessing the database and what privileges should be given to the users.

**User id** and **password** must be maintained to restrict data access and empower data integrity.

The new system should be a very simple and easy to use one; most important it should be very user friendly so that the user can get used to, without a lot of pre-training.

## **Advantages of the proposed System**

1. All Registrations can be completed automatically as you enter data.
2. Data can be saved automatically soon after it is entered so that the risk of data being lost is minimized.
3. Sorting and storing documents and other information like searching is much easier.
4. Searching and retrieving data is much easier.
5. Validation rules can be used in order to guarantee better verification
6. Addition of new patients, modification of appointment, keeping the patient's treatment history will be simple

## **▪ SCOPE Of the Project :**

The project scope is patient and dentist/consultant management system of dental clinic and has to full fill all their needs such as registering the patients and capturing their data and retrieve back information any time.

This project is about Dental clinic management application, this application will consist of four important modules. Which will be like this: -

### **1) Patient management**

- 1)** Add patient information
- 2)** Search/edit patient info
- 3)** Set patient appointments
- 4)** Capture patient complaints
- 5)** Record patient diagnosis info.
- 6)** Keep patient treatment history

### **2) Dentist Management**

- 1) Add dentist
  - 2) Modify dentist info.
- 3) User Management**
- 1) User Registration
  - 2) User Reset Password
  - 3) Search User
- 4) Reports,** this part of application is very important and it will be derived from other modules. Within Reports we can easily generate reports using different search criteria about:-
- 1) Registered patients
  - 2) dentist's info
  - 3) Patient treatment history
  - 4) Number of patient we have for a given time

## ▪ **Feasibility Study**

The main objective of the feasibility study is to take care of the technical, Operational, logical and economic feasibility of developing the computerized system. All systems are feasible, given unlimited resources and infinite time. It is both necessary and useful to evaluate the feasibility of the project at System study phase itself. The feasibility study to be conducted for this project Involves.

- Technical Feasibility
- . Operational Feasibility
- Economic Feasibility
- Logical Feasibility

### **Technical Feasibility**

Technical feasibility includes Risk Resources availability and technologies. The management provides latest hardware and software facilities for the successful completion of the projects. With these latest hardware and software support the system will perform extremely well

### **Operational Feasibility**

In the existing manual system it is very difficult to maintain and update huge amount of information. The development of the system was started because of the requirement put forward by the management of the concerned entity. This system will handle the request in a better way and make the process easier thus, it is sure that the system developed is operationally feasible.

### **Economic Feasibility**

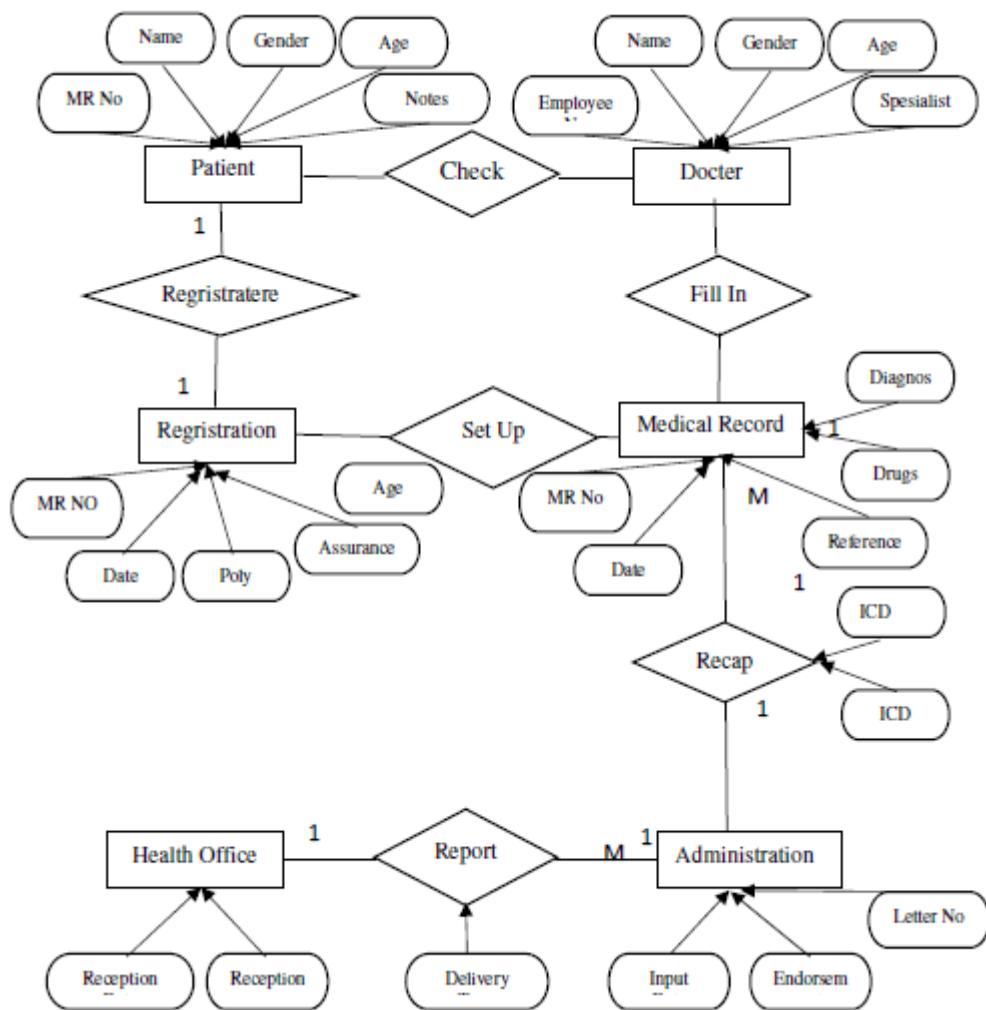
In the economic feasibility the development cost of the system is evaluated weighing it against the ultimate benefit derived from the new system. It is found that the benefit, from the new system would be more than the cost and time involved in its development.

## **Legal Feasibility**

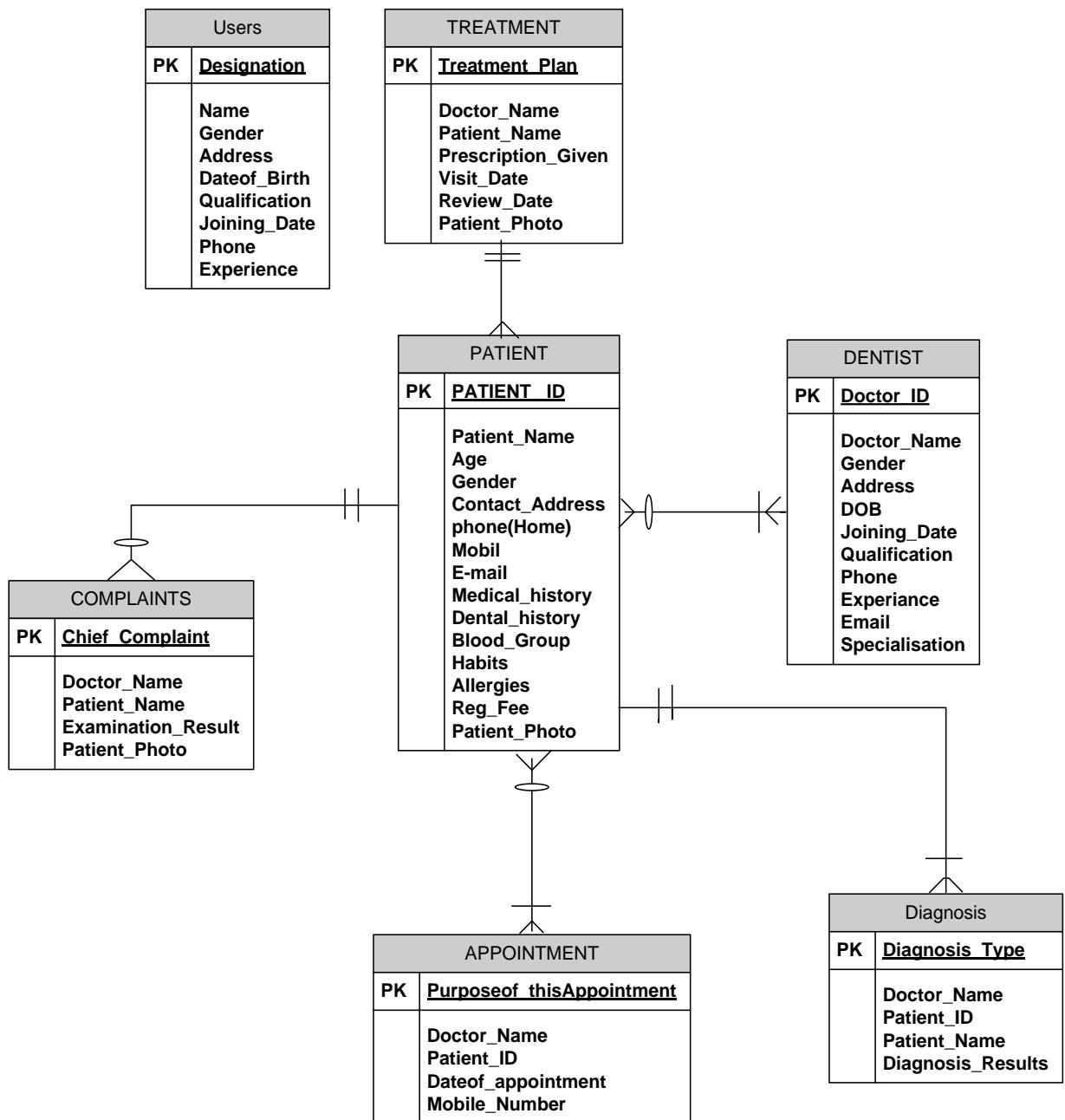
In the legal feasibility it is necessary to check that the software we are going to develop is legally correct which means that the ideas which we have taken for the proposed system will be legally implemented or not. So, it is also an important step in feasibility study.

## ▪ Diagram

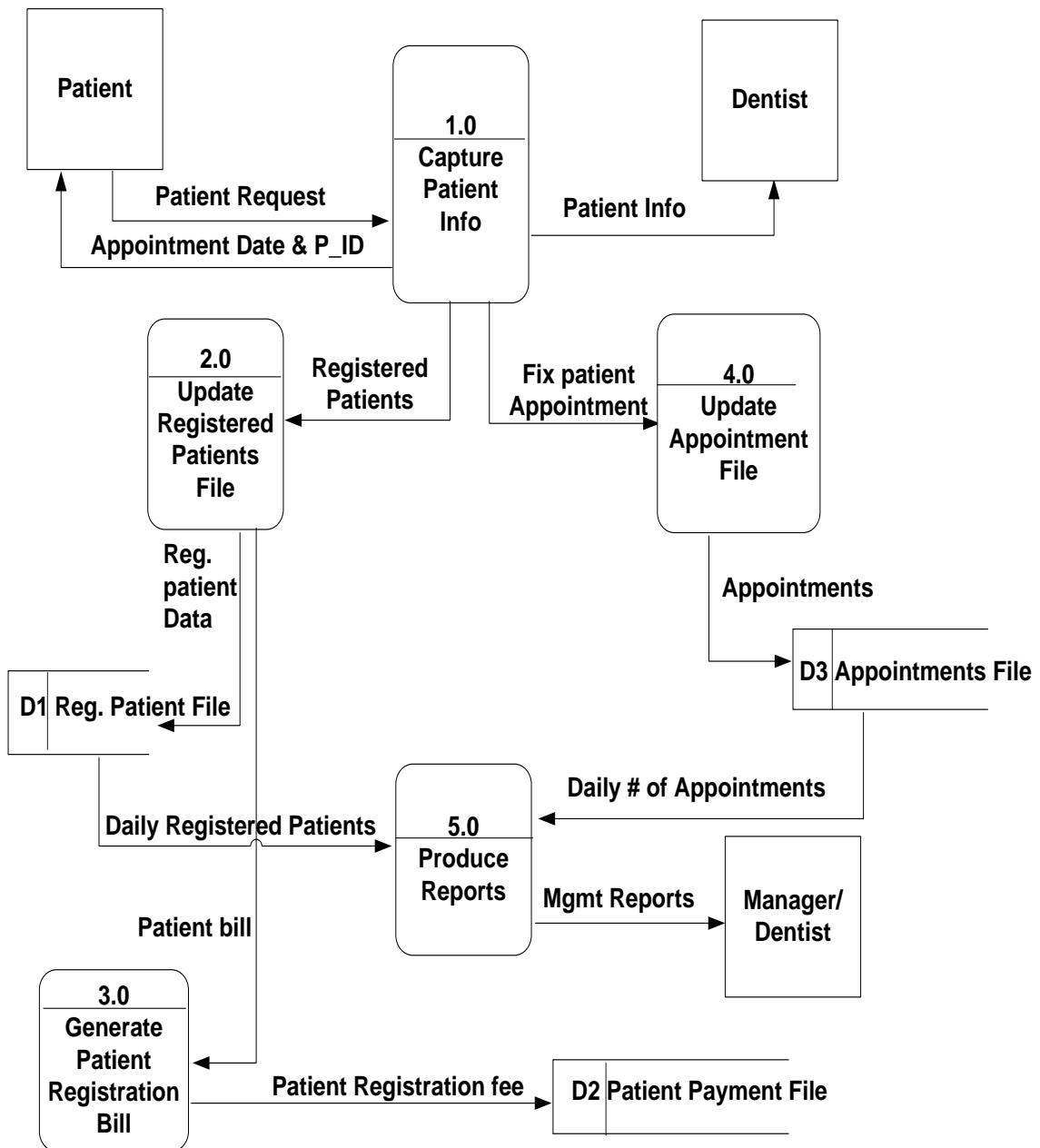
### • ER Diagram



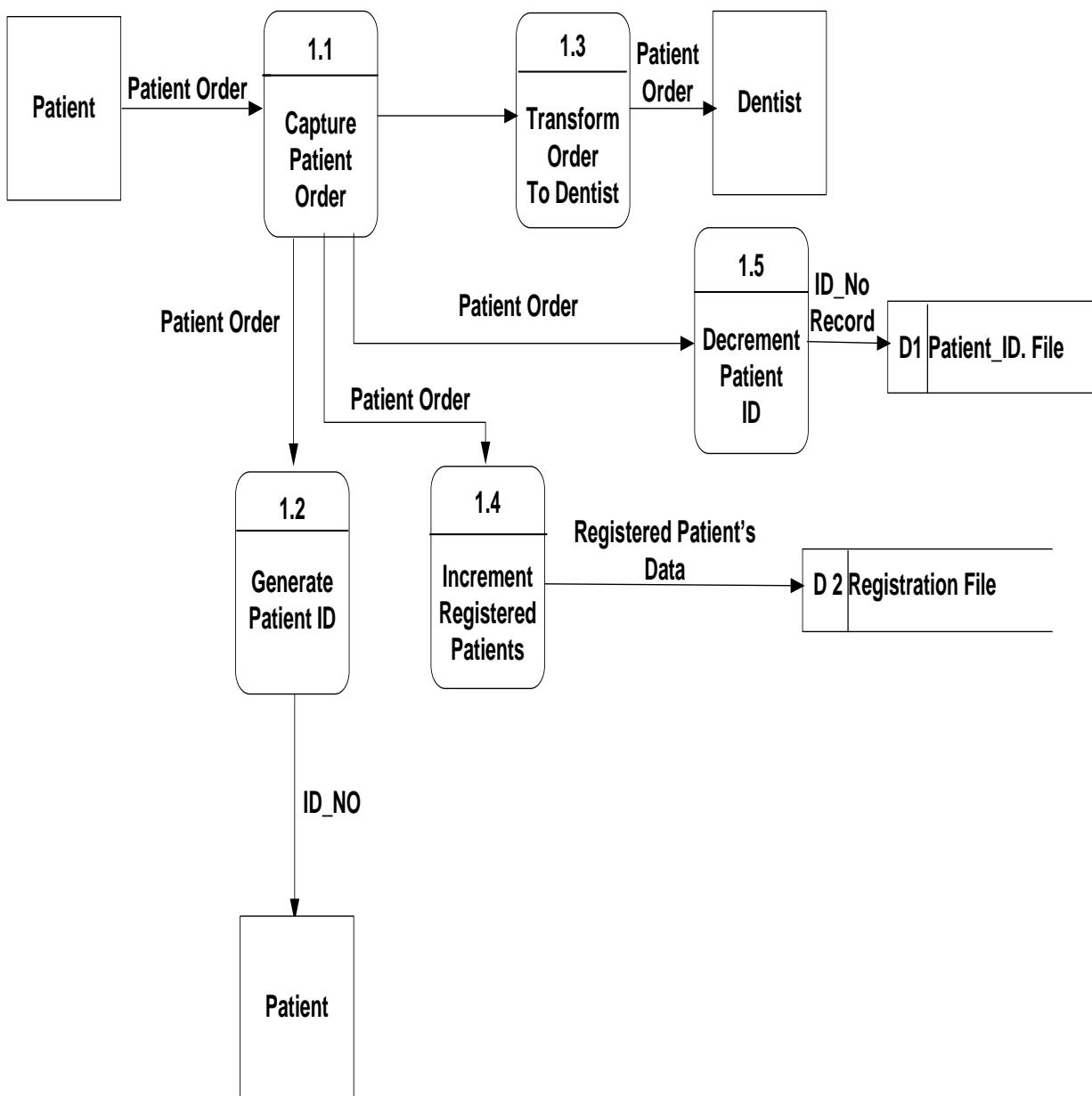
- Class Diagram

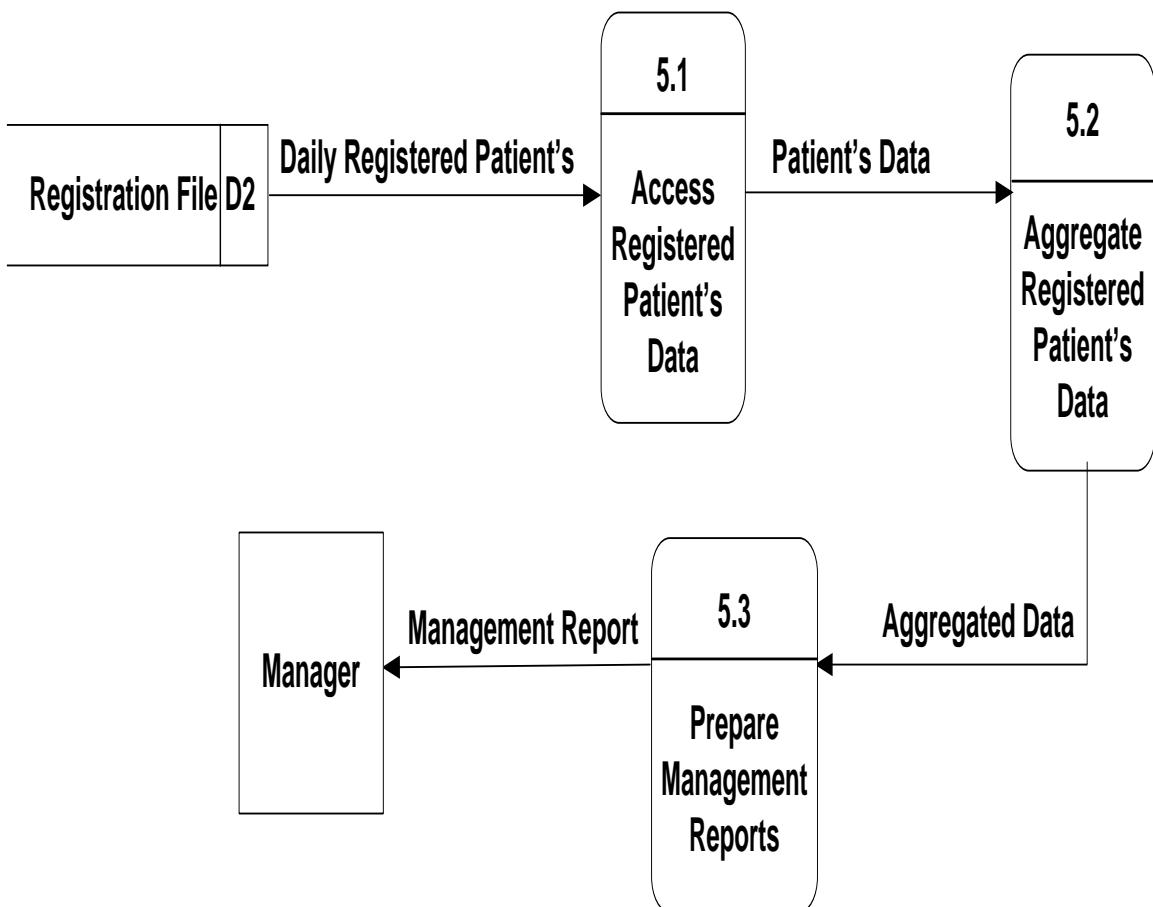


- Zero level DFD Diagram

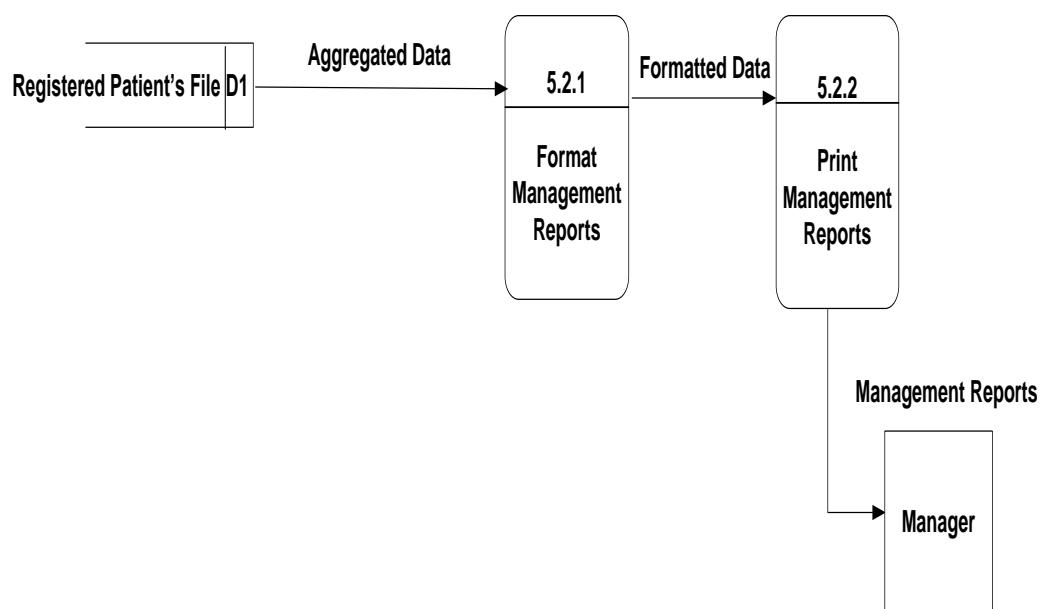


- First Level DFD Diagram





- **Second Level DFD Diagram**



## **▪ S/W & H/W Requirement Specification :**

### **H/W Configuration (Server Side):**

- Processor – Core i3 & above
- Speed - 2 GHz & above
- RAM – 2 GB & above

### **Software (Server Side):**

Operating System : Windows 10,11

Front end : CSS style sheet/HTML tags

Middle ware : Java Development Kit(JDK 1.5.0)

Backend : MySQL Database Server

Server : Apache Tomcat, Wamp

### **H/W Configuration (Client Side):**

- Processor – Core i3 & above
- Speed – 2 GHz & above
- RAM – 2 GB & above

### **Software (Client Side):**

Operating System: Windows 10,11

Web Browser: Google Chrome, Mozilla Firefox , etc.

## ■ System Design

### Database

A database is a collection of [information](#) that is organized so that it can easily be accessed, managed, and updated. In one view, databases can be classified according to types of content bibliographic, full-text, numeric, and images.

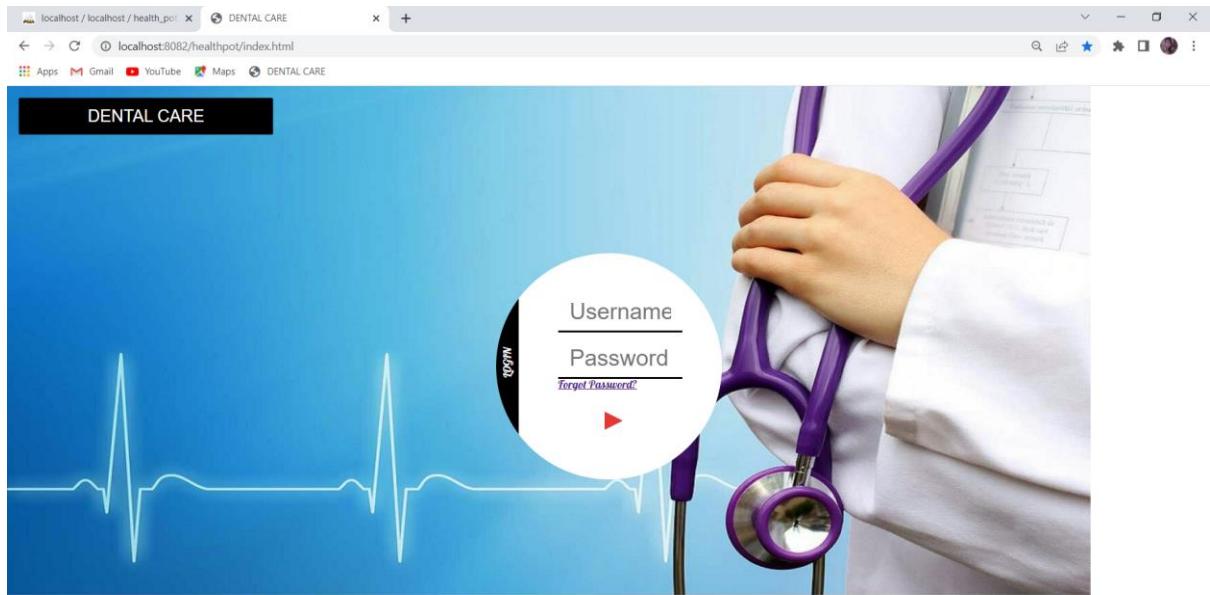
A database is a list or a group of lists of objects organized to make the list(s) and their values easy to create and manage.

In the computer world, this suggests, rightly, that the list(s) and (their) values are stored in a machine.

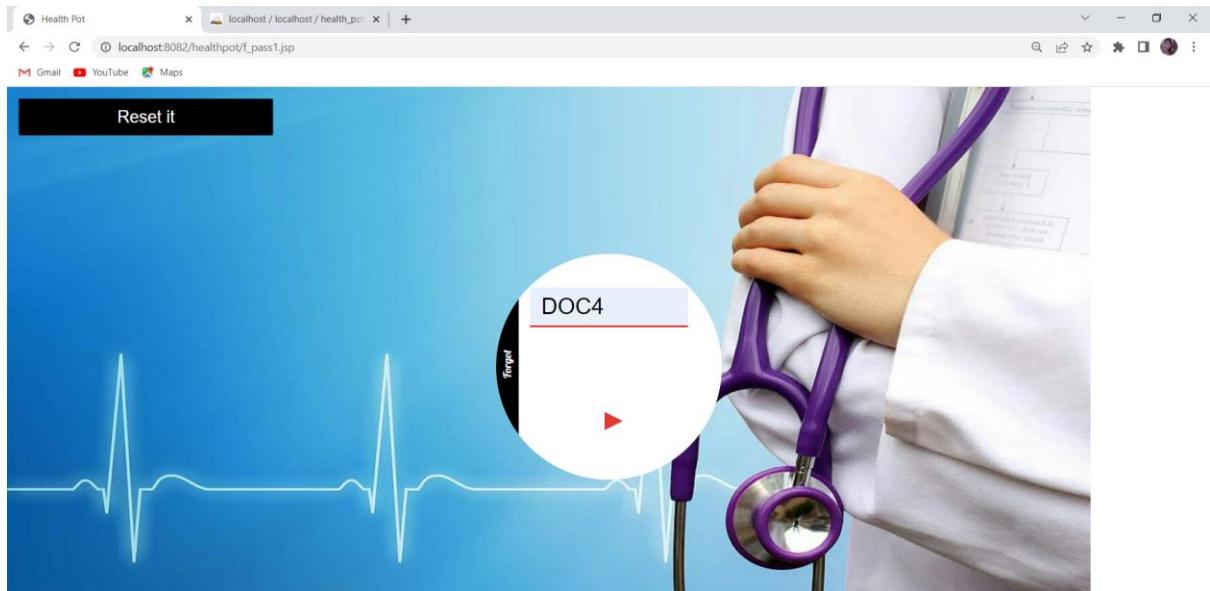
As information becomes of high importance, almost every company keeps some type of database, whether it includes its employees, its customers, or the products it sells.

## Screenshots :

- LOGIN PAGE

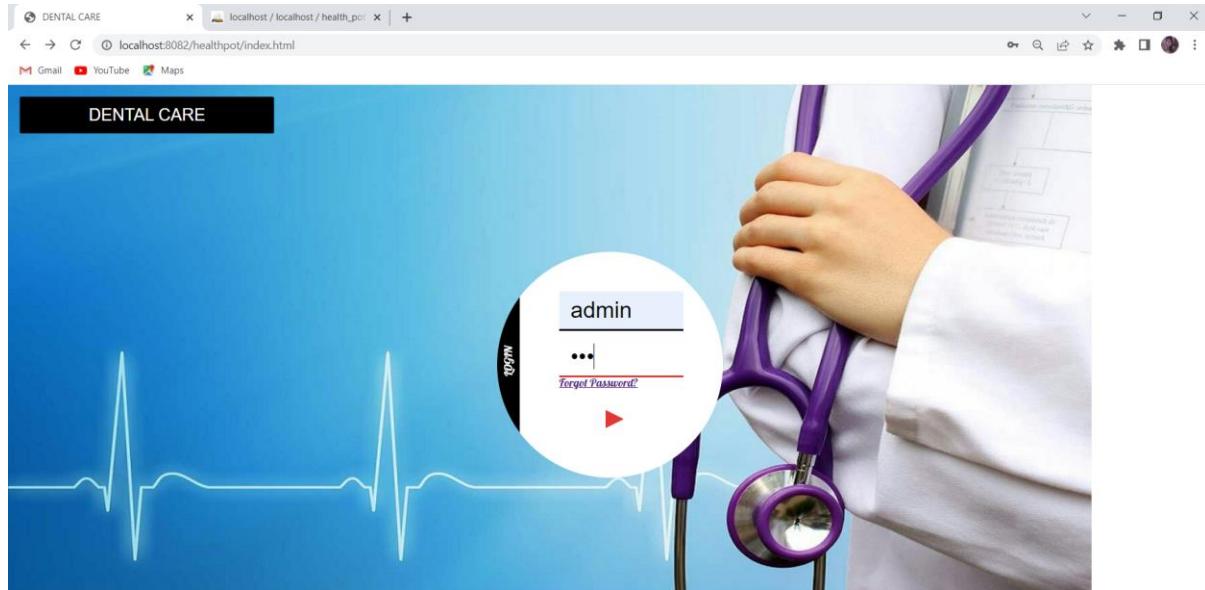


## Forgot password :



## Admin login

Log id : admin ,password :123



## Hospital information :

Hospital Id	Hospital Name	Address	City	Location	Area	Contact No	Email Id	Website	Hospital Code	Delete	Edit
6	KLE	Chikhali	Chikhali	Chikhali	Chikhali	6935733555	rp@gmail.com	KLE.com	HOP6	Delete	Edit
7	KLE	Nigadi	Pune	Nigadi	Nigadi	1234567897	rp@gmail.com	KLE.com	HOP7	Delete	Edit

## Function add new :-

The screenshot shows a web browser window with the URL `localhost:8082/healthpot/Admin/hospital_form.jsp`. The page title is "DENTAL CARE". On the left, there is a sidebar with a red cross icon and the word "ADMIN". The main content area is titled ">Hospital". It contains a form with the following fields:

Hospital Name	<input type="text"/>
Address	<input type="text"/>
City	<input type="text"/>
Location	<input type="text"/>
Area	<input type="text"/>
Contact No	<input type="text"/>
Email Id	<input type="text"/>
Website	<input type="text"/>
Hospital code	<input type="text"/> HOP8

At the bottom right of the form are two buttons: "Submit" and "Reset". A footer bar at the bottom of the page displays the text "2022 - Developed By Group No 33".

## Function : add new

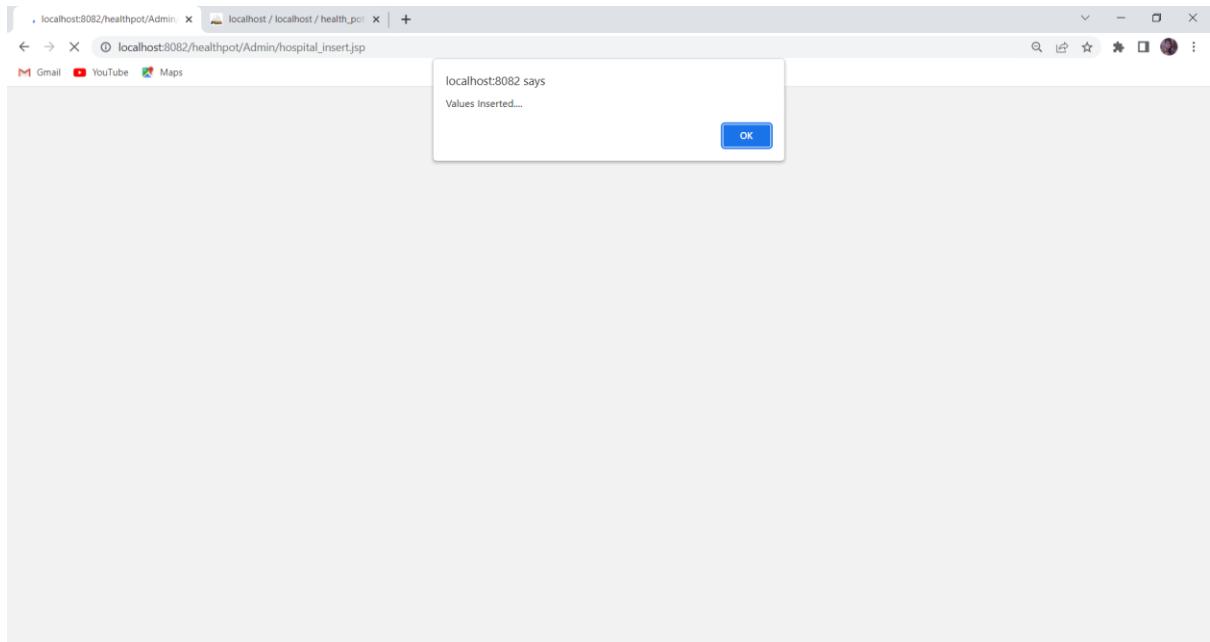
### Ex .Values

The screenshot shows the same web browser window and Admin interface as the previous one. The main content area is titled ">Hospital". The form fields now contain the following values:

Hospital Name	<input type="text"/> lokmanya
Address	<input type="text"/> nigdi
City	<input type="text"/> pcmc
Location	<input type="text"/> Nigdi
Area	<input type="text"/> pune
Contact No	<input type="text"/> 2345678432
Email Id	<input type="text"/> lokmanya@gmail.com
Website	<input type="text"/> lokmnyahosd.com
Hospital code	<input type="text"/> HOP8

At the bottom right of the form are two buttons: "Submit" and "Reset". A footer bar at the bottom of the page displays the text "2022 - Developed By Group No 33".

**Values inserted successfully**



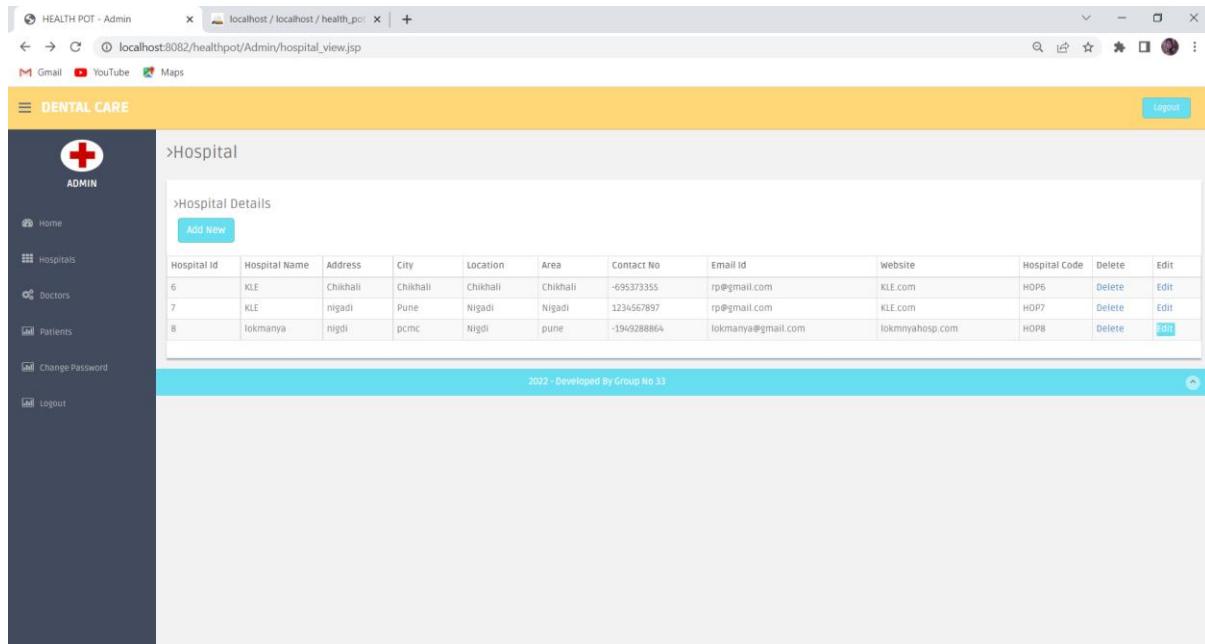
**Updated**

A screenshot of a web application titled 'DENTAL CARE'. The left sidebar has a dark theme with icons for Home, Hospitals, Doctors, Patients, Change Password, and Logout. The main content area has a yellow header 'DENTAL CARE' and a blue footer 'Logout'. The central part shows a table titled 'Hospital Details' with columns: Hospital Id, Hospital Name, Address, City, Location, Area, Contact No, Email Id, Website, Hospital Code, Delete, and Edit. There are three rows of data:

Hospital Id	Hospital Name	Address	City	Location	Area	Contact No	Email Id	Website	Hospital Code	Delete	Edit
6	KLE	Chikhali	Chikhali	Chikhali	Chikhali	-695373355	rp@gmail.com	KLE.com	HOP6	Delete	Edit
7	KLE	nigadi	Pune	Nigadi	Nigadi	1234567897	rp@gmail.com	KLE.com	HOP7	Delete	Edit
8	okmanya	nigdi	pune	nigdi	pune	1949288864	okmanya@gmail.com	okmanya@osp.com	HOP8	Delete	Edit

The footer of the page includes the text '2022 - Developed By Group No 33'.

## Function : edit

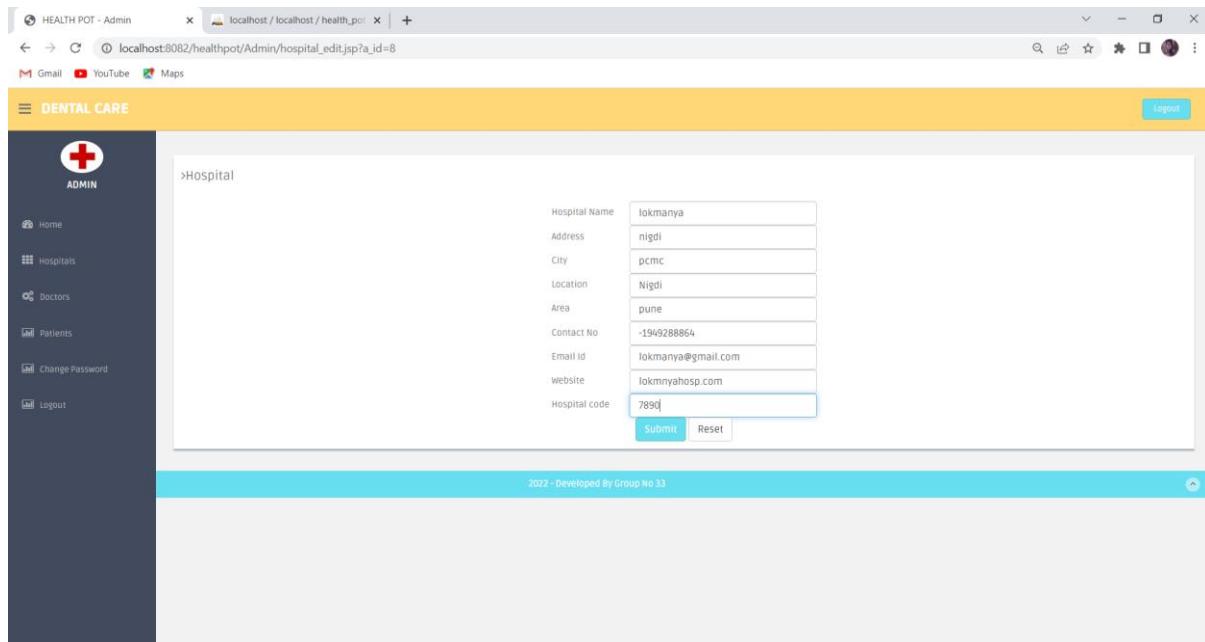


The screenshot shows a web browser window titled "HEALTH POT - Admin" with the URL "localhost:8082/healthpot/Admin/hospital\_view.jsp". The page has a yellow header bar with the text "DENTAL CARE" and a "Logout" button. On the left, there is a dark sidebar with a red cross icon labeled "ADMIN" and links for Home, Hospitals, Doctors, Patients, Change Password, and Logout. The main content area is titled ">Hospital" and contains a sub-section titled ">Hospital Details". It features a table with columns: Hospital Id, Hospital Name, Address, City, Location, Area, Contact No, Email Id, Website, and Hospital Code. There are three rows of data:

Hospital Id	Hospital Name	Address	City	Location	Area	Contact No	Email Id	Website	Hospital Code	Delete	Edit
6	KLE	Chikhali	Chikhali	Chikhali	-69373355	rp@gmail.com	KLE.com	HOP6	Delete	Edit	
7	KLE	nigdi	Pune	Nigadi	1234567897	rp@gmail.com	KLE.com	HOP7	Delete	Edit	
8	lokmanya	nigdi	pcmc	Nigdi	pune	-1949288864	lokmanya@gmail.com	lokmyyahosp.com	HOP8	Delete	Edit

At the bottom of the page, a footer bar displays "2022 - Developed By Group No 33".

Ex. Hospital code: Hop8



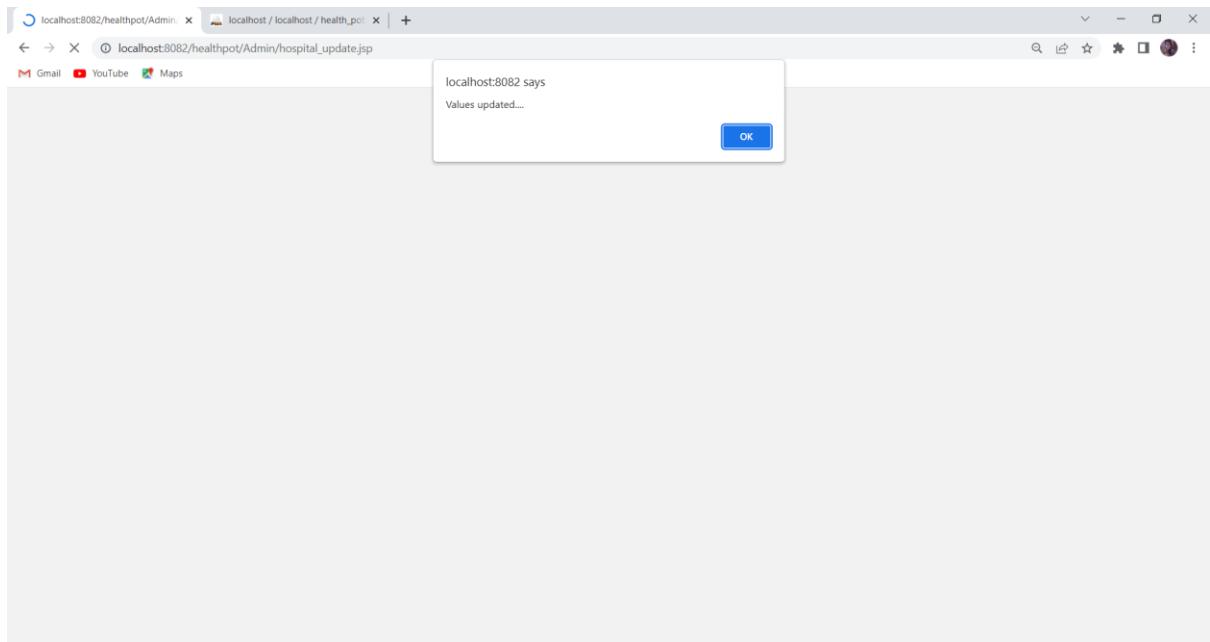
The screenshot shows a web browser window titled "HEALTH POT - Admin" with the URL "localhost:8082/healthpot/Admin/hospital\_edit.jsp?a\_id=8". The page has a yellow header bar with the text "DENTAL CARE" and a "Logout" button. On the left, there is a dark sidebar with a red cross icon labeled "ADMIN" and links for Home, Hospitals, Doctors, Patients, Change Password, and Logout. The main content area is titled ">Hospital" and contains a form for editing hospital details. The form fields and their values are:

Hospital Name	lokmanya
Address	nigdi
City	pcmc
Location	Nigdi
Area	pune
Contact No	-1949288864
Email Id	lokmanya@gmail.com
Website	lokmyyahosp.com
Hospital code	7890

At the bottom of the form, there are "Submit" and "Reset" buttons.

At the very bottom of the page, a footer bar displays "2022 - Developed By Group No 33".

**Value updated :**

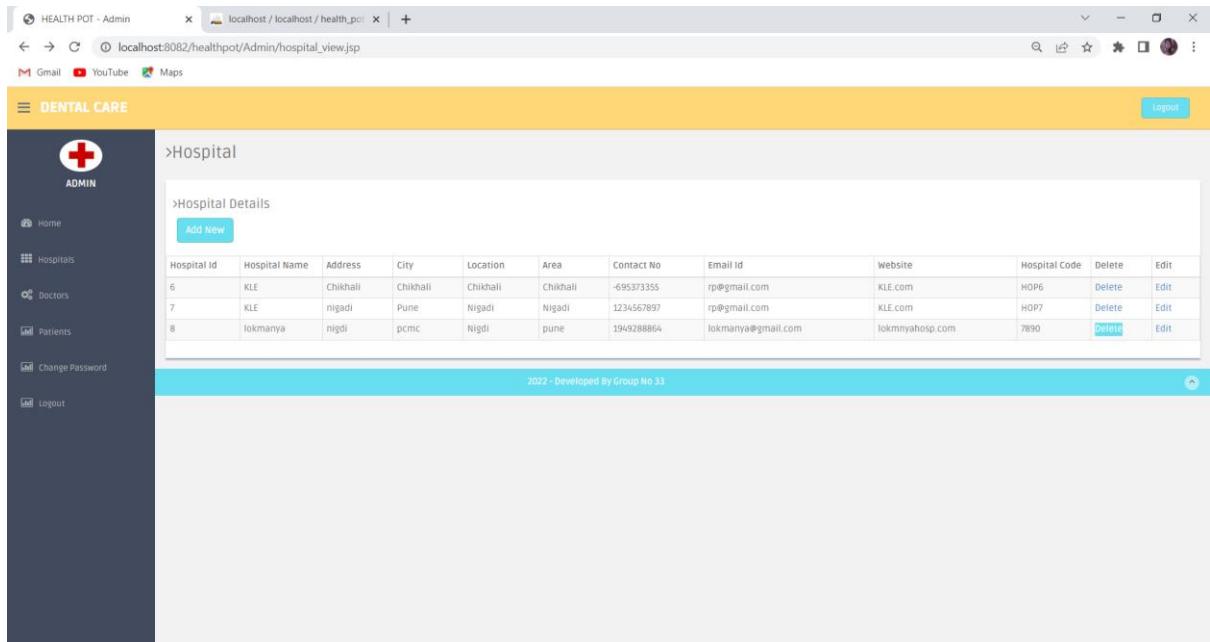


**Updated successfully :**

A screenshot of a web application titled 'DENTAL CARE'. The left sidebar has a dark theme with icons for Home, Hospitals, Doctors, Patients, Change Password, and Logout. The main content area has a yellow header with the title '>Hospital'. Below it is a sub-header '>Hospital Details' with a 'Add New' button. A table lists three hospitals with the following data:

Hospital Id	Hospital Name	Address	City	Location	Area	Contact No	Email Id	Website	Hospital Code	Delete	Edit
6	KLE	Chikhali	Chikhali	Chikhali	Chikhali	-695373355	rp@gmail.com	KLE.com	HOP6	Delete	Edit
7	KLE	nigadi	Pune	Nigadi	Nigadi	1234567897	rp@gmail.com	KLE.com	HOP7	Delete	Edit
8	Ilokmanya	nigdi	pcmc	Nigdi	pune	1949288864	lokmanya@gmail.com	lokmanyahosp.com	7890	Delete	Edit

## Function : delete

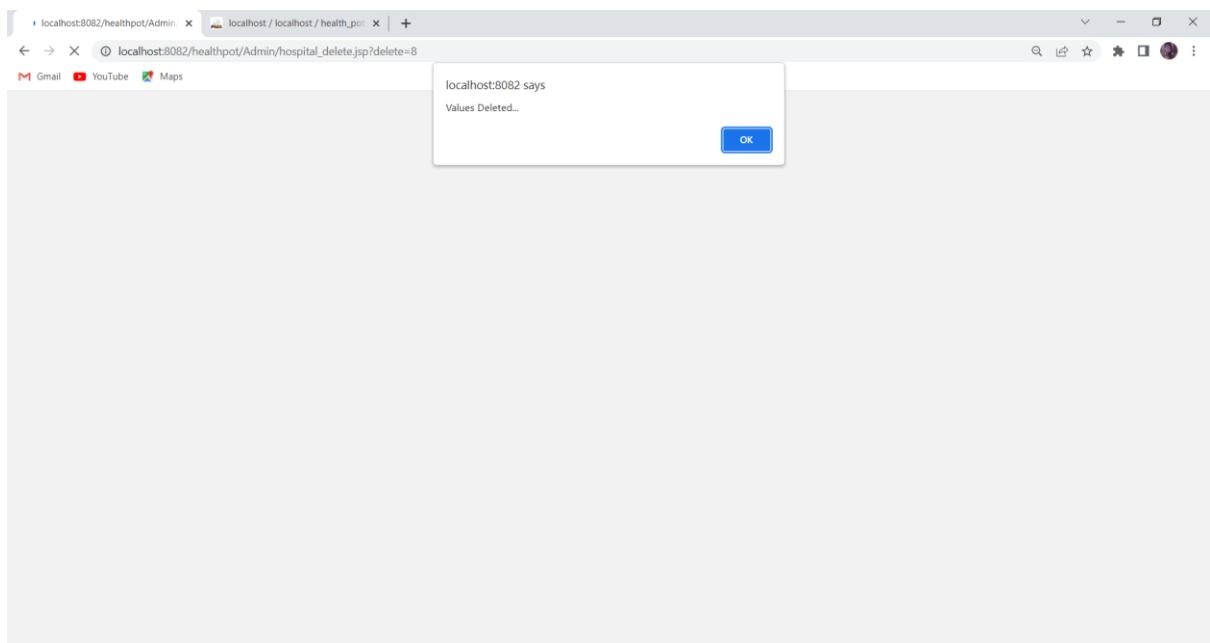


The screenshot shows a web application interface for managing hospitals. On the left, a sidebar menu titled 'DENTAL CARE' includes options like Home, Hospitals, Doctors, Patients, Change Password, and Logout. The main content area is titled '>Hospital' and '>Hospital Details'. It features a table with columns: Hospital Id, Hospital Name, Address, City, Location, Area, Contact No, Email Id, Website, Hospital Code, Delete, and Edit. Three rows of data are listed:

Hospital Id	Hospital Name	Address	City	Location	Area	Contact No	Email Id	Website	Hospital Code	Delete	Edit
6	KLE	Chikhali	Chikhali	Chikhali	Chikhali	-695373355	rp@gmail.com	KLE.com	HOP6	<a href="#">Delete</a>	<a href="#">Edit</a>
7	KLE	nigadi	Pune	Nigadi	Nigadi	1234567897	rp@gmail.com	KLE.com	HOP7	<a href="#">Delete</a>	<a href="#">Edit</a>
8	lokmanya	nigdi	pcmc	Nigdi	pune	1949288864	lokmanya@gmail.com	lokmanyahosp.com	7890	<a href="#">Delete</a>	<a href="#">Edit</a>

At the bottom of the page, a footer bar displays '2022 - Developed By Group N6 33'.

**Deleted successfully:**



The screenshot shows a confirmation dialog box centered on the screen. The message inside the box reads: 'localhost:8082 says' followed by 'Values Deleted...' and a large 'OK' button at the bottom right.

## Remaining values :

The screenshot shows a web browser window titled "HEALTH POT - Admin" with the URL "localhost:8082/healthpot/Admin/hospital\_view.jsp". The page has a yellow header bar with the title "DENTAL CARE" and a "Logout" button. On the left, there is a dark sidebar with a red cross icon and the word "ADMIN". The main content area is titled ">Hospital" and contains a sub-section ">Hospital Details". A "Add New" button is visible. Below it is a table with columns: Hospital Id, Hospital Name, Address, City, Location, Area, Contact No, Email Id, Website, Hospital Code, Delete, and Edit. Two rows of data are present:

Hospital Id	Hospital Name	Address	City	Location	Area	Contact No	Email Id	Website	Hospital Code	Delete	Edit
6	KLE	Chikhali	Chikhali	Chikhali	Chikhali	-695373355	rp@gmail.com	KLE.com	HOP6	<a href="#">Delete</a>	<a href="#">Edit</a>
7	KLE	nigadi	Pune	Nigadi	Nigadi	1234567897	rp@gmail.com	KLE.com	HOP7	<a href="#">Delete</a>	<a href="#">Edit</a>

At the bottom of the page, a footer bar displays the text "2022 - Developed By Group No 33".

## Doctor information :

The screenshot shows a web browser window titled "HEALTH POT - Admin" with the URL "localhost:8082/healthpot/Admin/doctor\_view.jsp". The page has a yellow header bar with the title "DENTAL CARE" and a "Logout" button. On the left, there is a dark sidebar with a red cross icon and the word "ADMIN". The main content area is titled ">Doctor" and contains a sub-section ">Doctor Details". A "Add New" button is visible. Below it is a table with columns: Doctor Id, Doctor Name, Designation, Hospital Id, Email Id, Contact No, and Doctor code. One row of data is present:

Doctor Id	Doctor Name	Designation	Hospital Id	Email Id	Contact No	Doctor code
4	Rohit	MBBS	6	rohit@gmail.com	-695373355	DOC4

At the bottom of the page, a footer bar displays the text "2022 - Developed By Group No 33".

## Patient information :

The screenshot shows a web browser window with the URL [localhost:8082/healthpot/Admin/patient\\_view.jsp](http://localhost:8082/healthpot/Admin/patient_view.jsp). The page has a yellow header bar with the text 'DENTAL CARE' and a 'Logout' button. On the left, there is a dark sidebar with a red cross icon labeled 'ADMIN' and several menu items: Home, Hospitals, Doctors, Patients, Change Password, and Logout. The main content area is titled '>Patient' and contains a sub-section '>Patient Details'. A table displays patient information with the following data:

Patient Id	Patient No	Patient Full Name	Gender	DOB	Address	City	Contact No	Email Id
2	4545	SGSGS	GDFDFG	0000-00-00	dfgf	sdfsfg	525245	sdgsf
5	20174	san k	Male	2017-04-14	Dharwad	Dharwad	2347483647	san@gmail.com
6	20226	vinayak	Male	2022-03-01	Chikhali	Pune	-695373355	rpi@gmail.com

At the bottom of the page, a footer bar displays the text '2022 - Developed By Group No 33'.

## Change password :

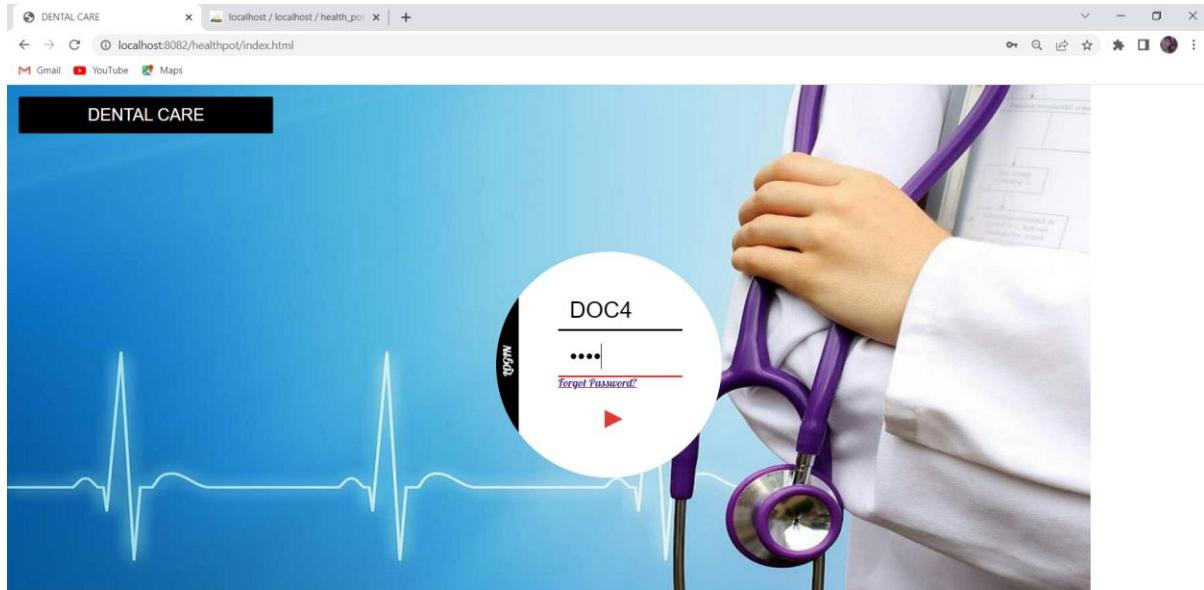
The screenshot shows a web browser window with the URL [localhost:8082/healthpot/Admin/Change\\_Password.jsp](http://localhost:8082/healthpot/Admin/Change_Password.jsp). The page has a yellow header bar with the text 'DENTAL CARE' and a 'Logout' button. On the left, there is a dark sidebar with a red cross icon labeled 'ADMIN' and several menu items: Home, Hospitals, Doctors, Patients, Change Password, and Logout. The main content area is titled 'Change Password' and contains a form with three input fields:

- Old Password\*
- New Password\*
- Confirm Password\*

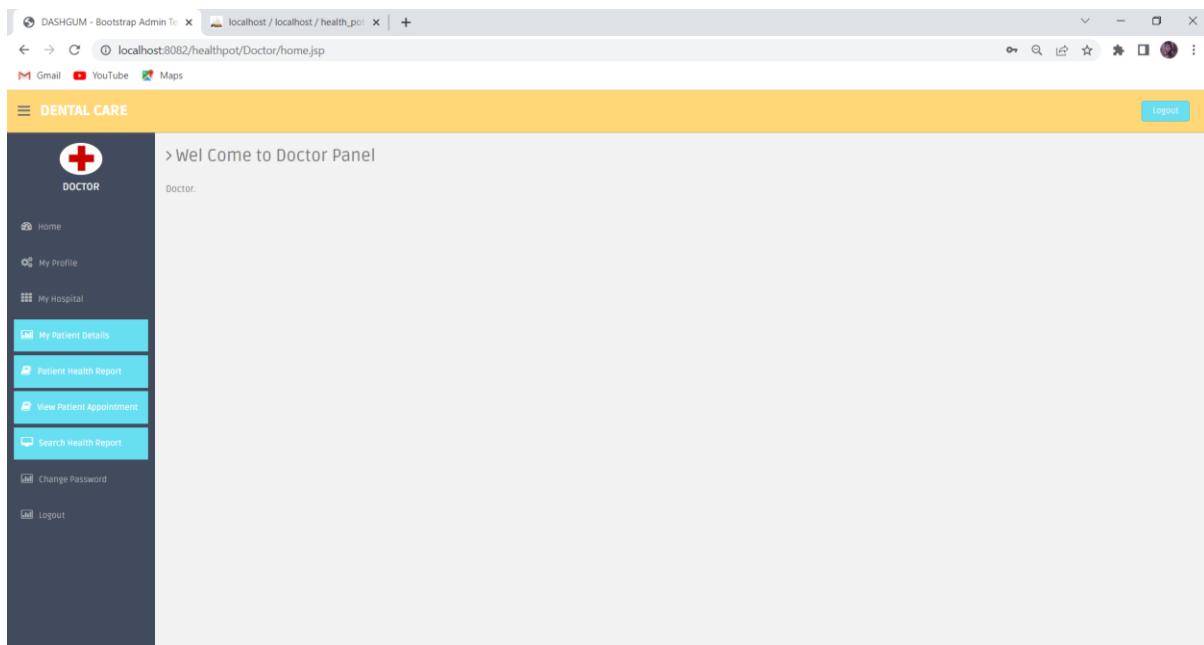
Below the form are two buttons: 'Submit' and 'Reset'. At the bottom of the page, a footer bar displays the text '2022 - Developed By Group No 33'.

## Doctor log in

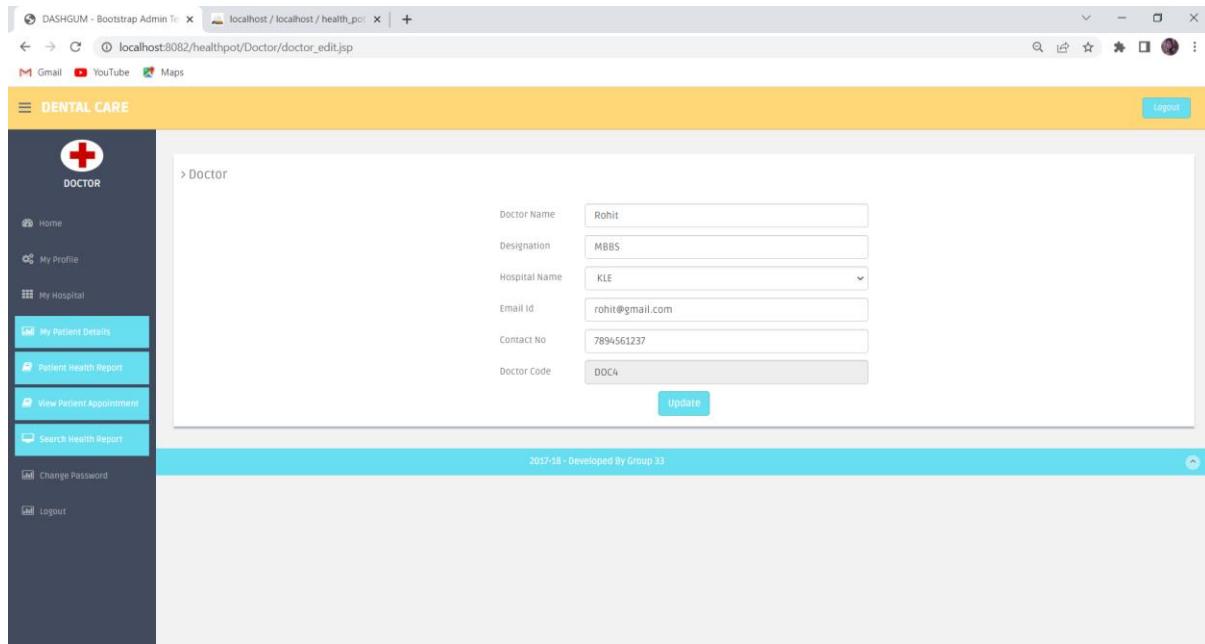
Ex. Log id : DOC4 , password : DOC4



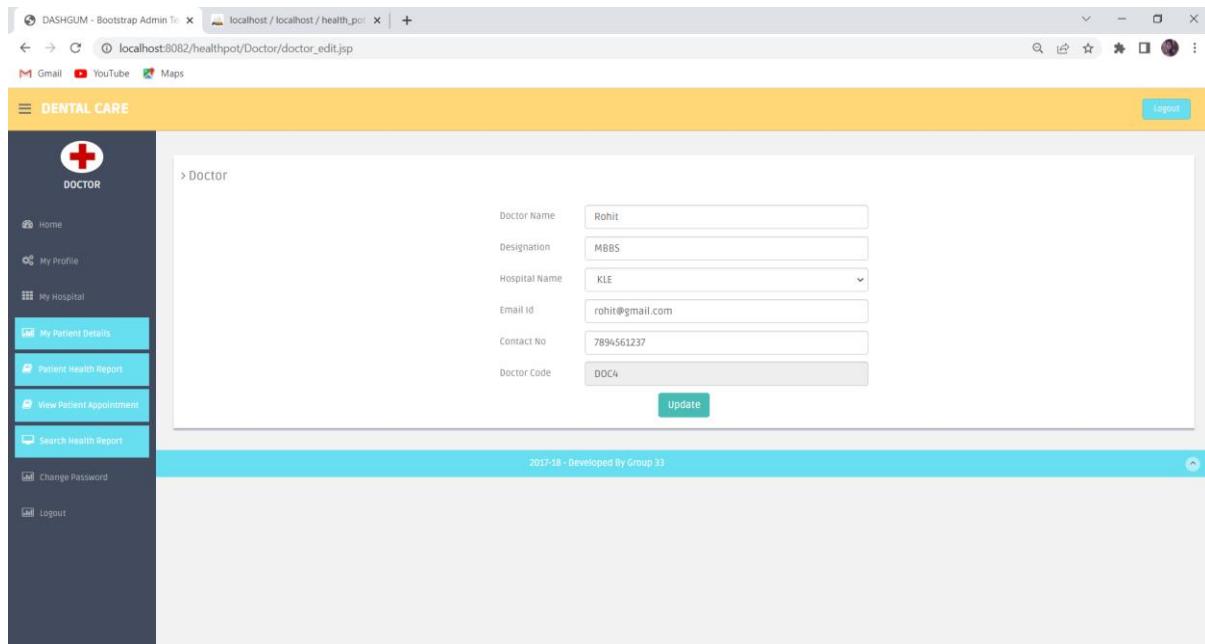
## Doctors Dashboard/profile :



## Profile of doctors :



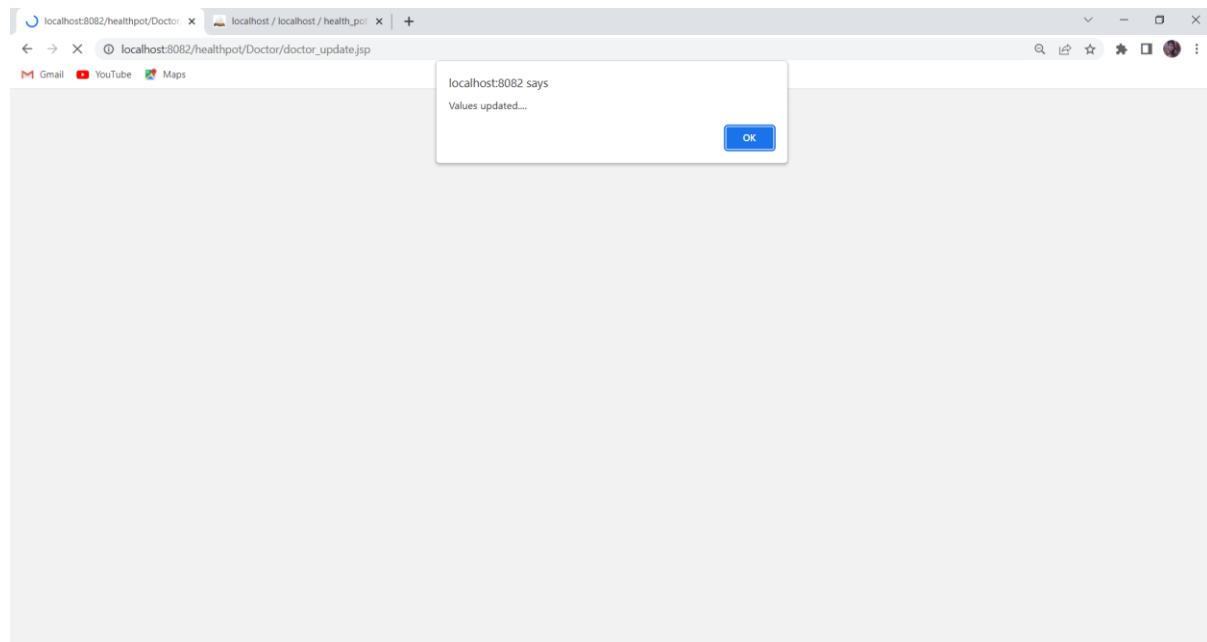
## Function update :



**Updated contact no : 123456780**

A screenshot of a web browser window showing a doctor profile editing form. The URL is `localhost:8082/healthpot/Doctor/doctor_edit.jsp`. The page has a yellow header bar with the text "DENTAL CARE" and a "Logout" button. On the left, there is a sidebar with a doctor icon and links: Home, My Profile, My Hospital, My Patient Details (which is highlighted in blue), Patient Health Report, View Patient Appointment, Search Health Report, Change Password, and Logout. The main content area shows a "Doctor" section with fields: Doctor Name (Rohit), Designation (MBBS), Hospital Name (KLE), Email Id (rohit@gmail.com), Contact No (7898561234) which is highlighted in green, and Doctor Code (DOC4). An "Update" button is at the bottom right. At the very bottom of the page, it says "2017-18 - Developed By Group 33".

**Updated successfully:**



## Updated value :

Screenshot of the Doctor edit page ([localhost:8082/healthpot/Doctor/doctor\\_edit.jsp](http://localhost:8082/healthpot/Doctor/doctor_edit.jsp)) showing updated values for a doctor's profile.

The form fields are as follows:

Doctor Name	Rohit
Designation	MBBS
Hospital Name	KLE
Email Id	rohit@gmail.com
Contact No	123456780
Doctor Code	DOC4

**Logout** button is visible in the top right corner.

## Hospital information:

Screenshot of the Hospital edit page ([localhost:8082/healthpot/Doctor/hospital\\_edit.jsp](http://localhost:8082/healthpot/Doctor/hospital_edit.jsp)) showing updated values for a hospital's profile.

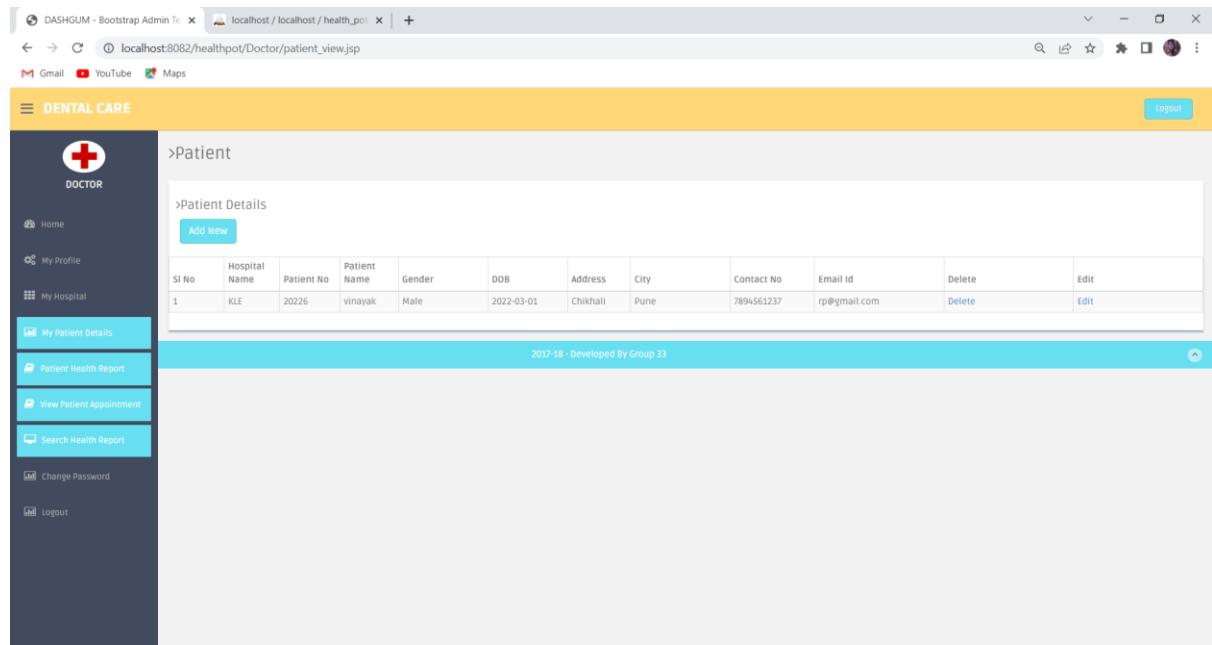
The form fields are as follows:

Hospital Name	KLE
Address	Chikhali
City	Chikhali
Location	Chikhali
Area	Chikhali
Contact No	-695373355
Email Id	rp@gmail.com
Website	KLE.com
Hospital code	HOP6

**Logout** button is visible in the top right corner.

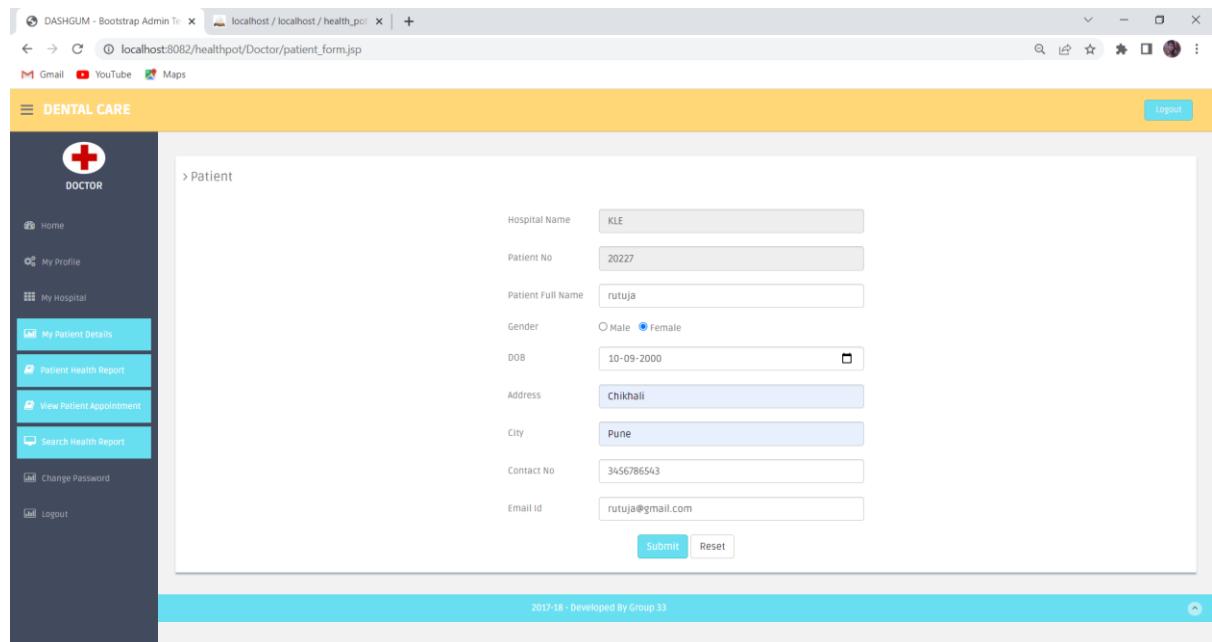
## Patients details :

### Function : add new



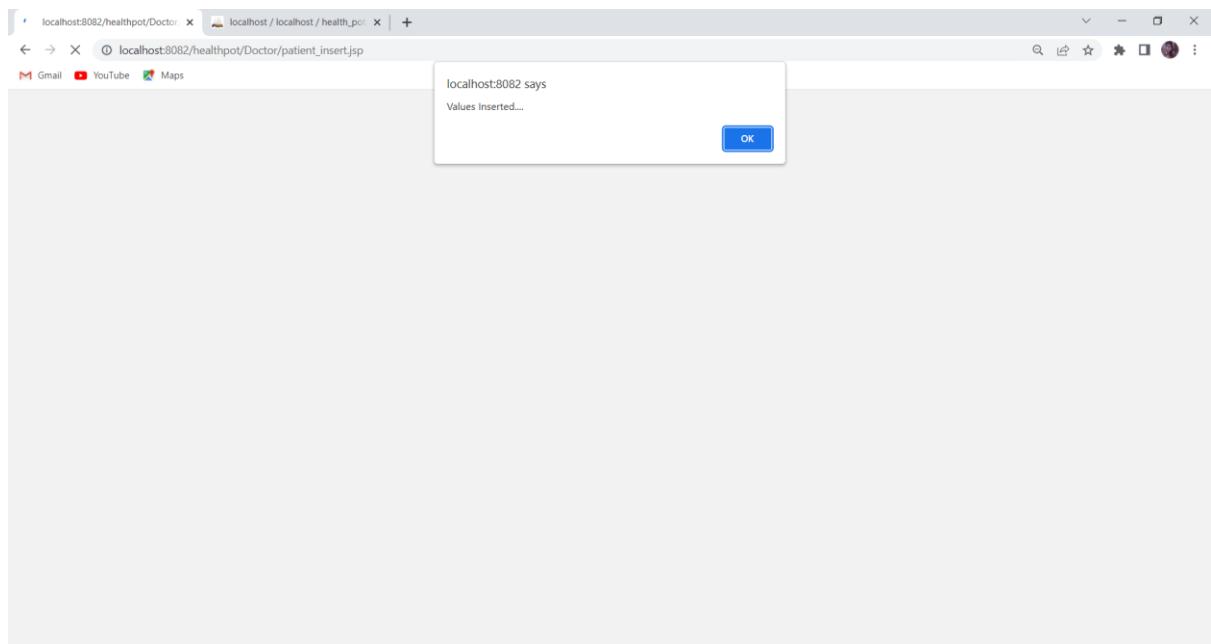
The screenshot shows a web application interface for managing patient details. The header includes a logo, the title 'DENTAL CARE', and a 'Logout' button. On the left, a sidebar menu lists options like Home, My Profile, My Hospital, and various report and appointment management links. The main content area is titled '>Patient' and contains a sub-section '>Patient Details'. A table displays patient information with columns for SI No, Hospital Name, Patient No, Patient Name, Gender, DOB, Address, City, Contact No, Email Id, Delete, and Edit. One record is listed: SI No 1, Hospital Name KLE, Patient No 20226, Patient Name vinayak, Gender Male, DOB 2022-03-01, Address Chikhali, City Pune, Contact No 7894561237, Email Id rp@gmail.com. Buttons for 'Delete' and 'Edit' are shown for each row. At the bottom of the page is a footer with the text '2017-18 - Developed By Group 33'.

### Add new : patients details



The screenshot shows a form for adding a new patient. The header and sidebar are identical to the previous screenshot. The main content area is titled '> Patient' and contains a form with the following fields: Hospital Name (KLE), Patient No (20227), Patient Full Name (rutuja), Gender (Male selected), DOB (10-09-2000), Address (Chikhali), City (Pune), Contact No (3456786543), and Email Id (rutuja@gmail.com). Below the form are 'Submit' and 'Reset' buttons. The footer text is '2017-18 - Developed By Group 33'.

**Updated successfully :**



**Updated value**

A screenshot of a web application titled 'DENTAL CARE'. The left sidebar has a dark theme with icons and labels: Home, My Profile, My Hospital, My Patient Details (which is highlighted in teal), Patient Health Report, View Patient Appointment, Search Health Report, Change Password, and Logout. The main content area has a yellow header 'Patient'. Below it is a sub-header 'Patient Details' with a 'Add New' button. A table displays patient information with columns: SI No, Hospital Name, Patient No, Patient Name, Gender, DOB, Address, City, Contact No, Email Id, Delete, and Edit. Two rows of data are shown: Row 1 (SI No 1) has values KLE, 20226, vinayak, Male, 2022-03-01, Chikhali, Pune, 7896561237, rp@gmail.com, Delete, Edit; Row 2 (SI No 2) has values KLE, 20227, futuja, Female, 2000-09-10, Chikhali, Pune, 9456786543, futuja@gmail.com, Delete, Edit. At the bottom of the page is a footer bar with the text '2017-18 - Developed By Group 33'.

## Health report details :

The screenshot shows a web browser window with the URL `localhost:8082/healthpot/Doctor/healthreport_view.jsp`. The page has a yellow header bar with the text 'DENTAL CARE' and a 'Logout' button. On the left, there is a dark sidebar with a doctor icon and several menu items: Home, My Profile, My Hospital, My Patient Details (highlighted in blue), Patient Health Report, View Patient Appointment, Search Health Report, Change Password, and Logout. The main content area is titled 'Health Report' and contains a sub-section 'Health Report Details'. It features a table with columns: Sl no, Doctor Name, Patient Name, Health Report Name, Diseases Name, Report 1, Report 2, Status, Date, Medicine, Reports Attached, and Delete. Two rows of data are present:

Sl no	Doctor Name	Patient Name	Health Report Name	Diseases Name	Report 1	Report 2	Status	Date	Medicine	Reports Attached	Delete
1	Rohit	vinayak	Root canal	cavity	wisdom tooth cavity	wisdom tooth cavity	Normal	2022-03-07	Medicines	Reports Attached	Delete
2	Rohit	vinayak	Root canal	cavity	wisdom tooth cavity	wisdom tooth cavity	Normal	2022-03-08	Medicines	Reports Attached	Delete

At the bottom of the page, a footer bar displays the text '2017-18 - Developed By Group 33'.

## Function : add new details

The screenshot shows a web browser window with the URL `localhost:8082/healthpot/Doctor/healthreport_form.jsp`. The layout is similar to the previous page, with a yellow header 'DENTAL CARE' and a 'Logout' button. The left sidebar includes the same menu items as before. The main content area is titled 'Healthreport' and contains a form with the following fields:

Doctor	<input type="text" value="Rohit"/>
Select Patient Name	<input type="text" value="-----Select Patient-----"/>
Health Report Name	<input type="text"/>
Diseases Name	<input type="text"/>
Report1	<input type="text"/>
Report2	<input type="text"/>
Status	<input type="text"/>
Date	<input type="text" value="2022-4-2"/>

At the bottom of the form are 'Submit' and 'Reset' buttons. A footer bar at the bottom of the page also displays the text '2017-18 - Developed By Group 33'.

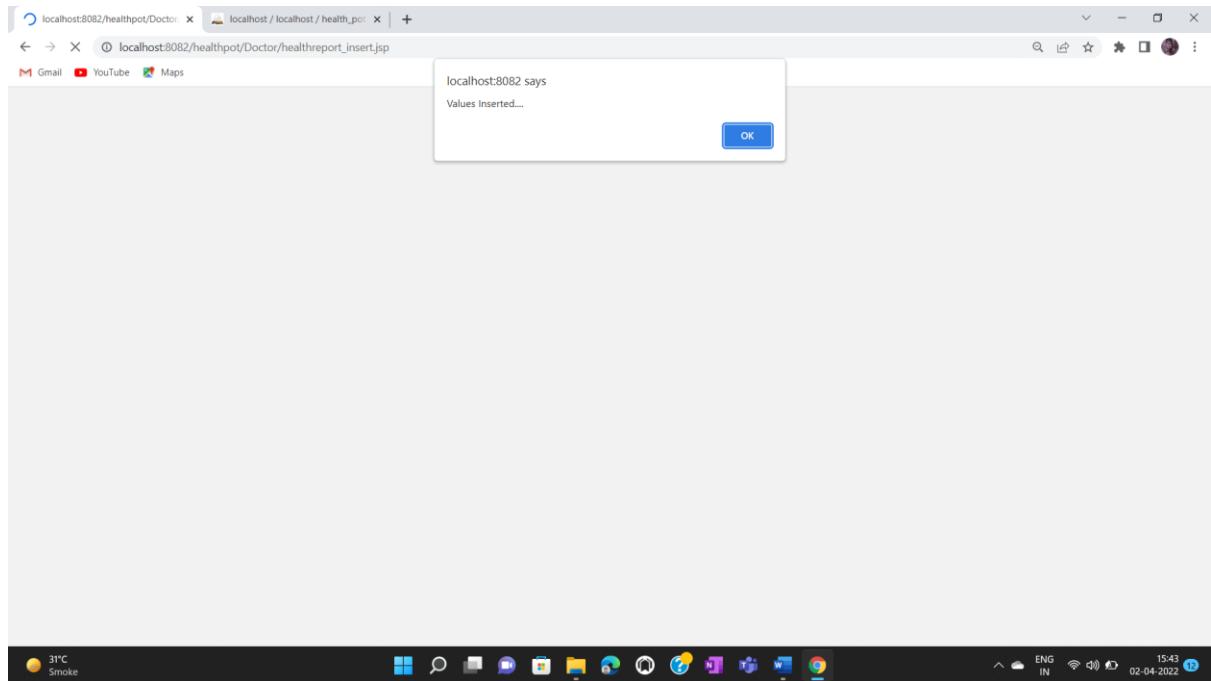
## Ex.

The screenshot shows a web browser window with the URL [localhost:8082/healthpot/Doctor/healthreport\\_form.jsp](http://localhost:8082/healthpot/Doctor/healthreport_form.jsp). The page has a yellow header bar with the text 'DENTAL CARE' and a 'Logout' button. On the left, there is a dark sidebar with a doctor icon and several menu items: Home, My Profile, My Hospital, My Patient Details (which is highlighted in blue), Patient Health Report, View Patient Appointment, Search Health Report, Change Password, and Logout. The main content area is titled 'Healthreport'. It contains the following form fields:

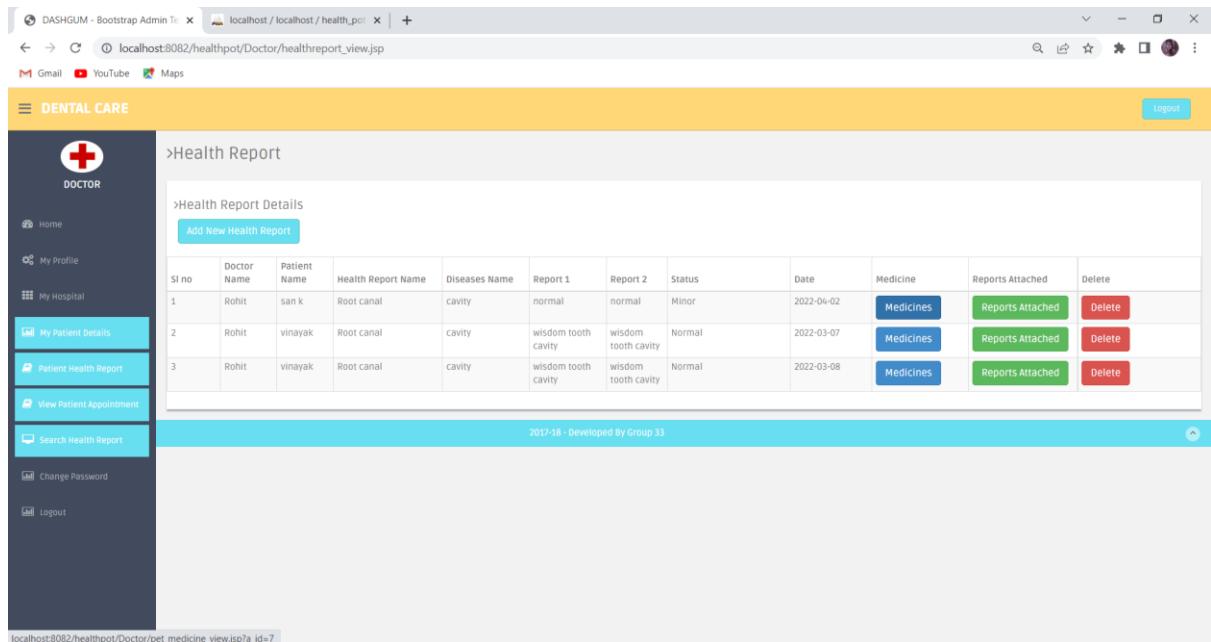
Doctor	Rohit
Select Patient Name	20174 / san k
Health Report Name	Root canal
Diseases Name	cavity
Report1	normal
Report2	normal
Status	Minor
Date	2022-4-2

At the bottom right of the form are 'Submit' and 'Reset' buttons. A footer bar at the bottom of the page contains the text '2017-18 - Developed By Group 33'.

**Value inserted**



## Medicine :

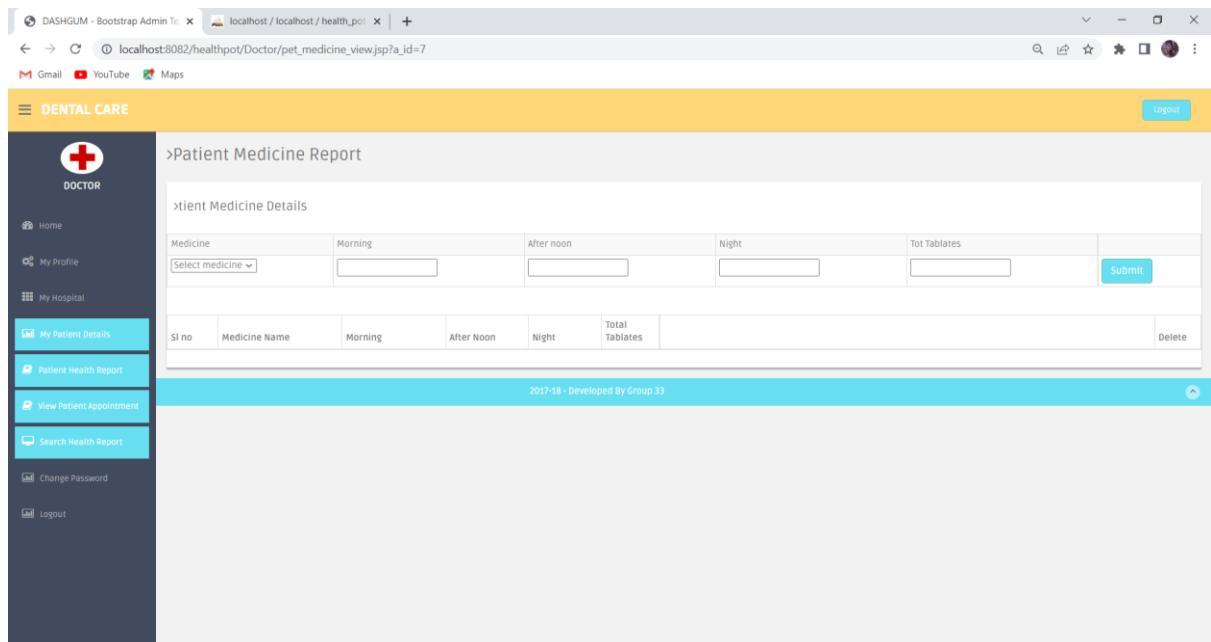


The screenshot shows a web application interface for a dental care system. The left sidebar has a dark theme with a red cross icon and the word 'DOCTOR'. It includes links for Home, My Profile, My Hospital, My Patient Details (highlighted in blue), Patient Health Report, View Patient Appointment, Search Health Report, Change Password, and Logout. The main content area has a yellow header bar with the text 'DENTAL CARE' and a 'Logout' button. Below it is a section titled 'Health Report' with a sub-section 'Health Report Details'. A button 'Add New Health Report' is visible. A table lists three entries:

Sl no	Doctor Name	Patient Name	Health Report Name	Diseases Name	Report 1	Report 2	Status	Date	Medicine	Reports Attached	Delete
1	Rohit	san k	Root canal	cavity	normal	normal	Minor	2022-04-02	Medicines	Reports Attached	Delete
2	Rohit	vinayak	Root canal	cavity	wisdom tooth cavity	wisdom tooth cavity	Normal	2022-03-07	Medicines	Reports Attached	Delete
3	Rohit	vinayak	Root canal	cavity	wisdom tooth cavity	wisdom tooth cavity	Normal	2022-03-08	Medicines	Reports Attached	Delete

At the bottom of the main content area, there is a footer bar with the text '2017-18 - Developed By Group 33'.

## Patient medicine report:



The screenshot shows a web application interface for a dental care system. The left sidebar has a dark theme with a red cross icon and the word 'DOCTOR'. It includes links for Home, My Profile, My Hospital, My Patient Details (highlighted in blue), Patient Health Report, View Patient Appointment, Search Health Report, Change Password, and Logout. The main content area has a yellow header bar with the text 'DENTAL CARE' and a 'Logout' button. Below it is a section titled 'Patient Medicine Report' with a sub-section 'Patient Medicine Details'. A dropdown menu 'Select medicine' is shown next to four input fields for Morning, After noon, Night, and Tot Tablets. A 'Submit' button is at the end of the row. A table below lists patient medicine details:

Sl no	Medicine Name	Morning	After Noon	Night	Total Tablets	Delete

At the bottom of the main content area, there is a footer bar with the text '2017-18 - Developed By Group 33'.

## Values :

Screenshot of the Patient Medicine Report page. The table shows the following data:

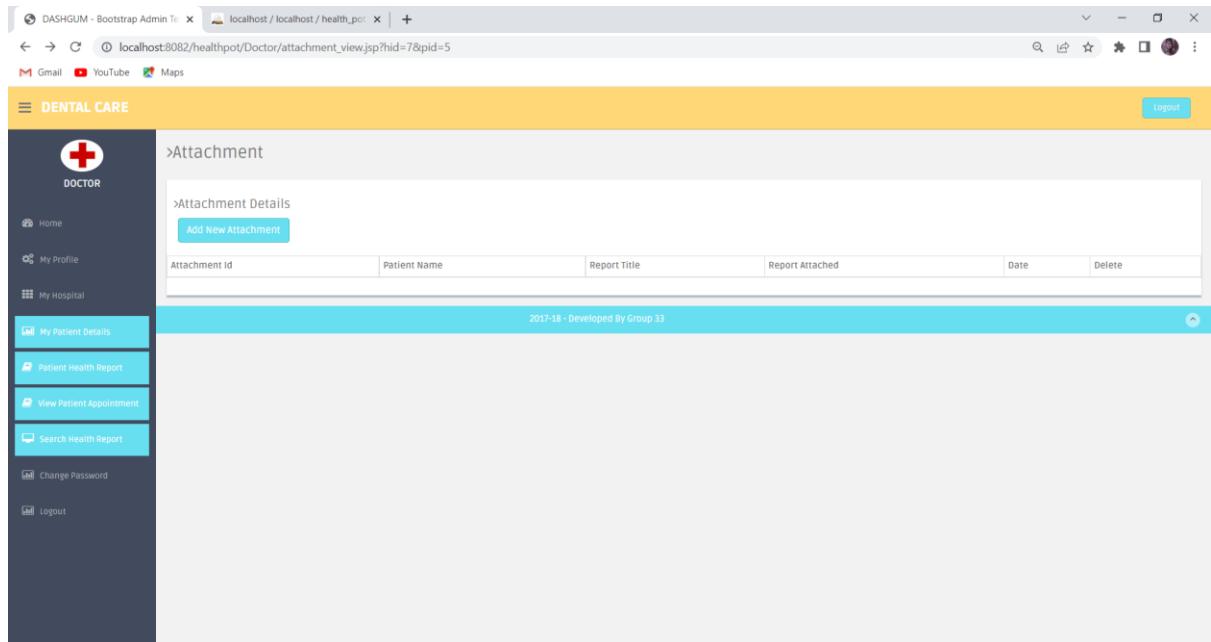
Medicine	Morning	After noon	Night	Tot Tablets
Dolo 500	1	1	1	30

## Values updated :

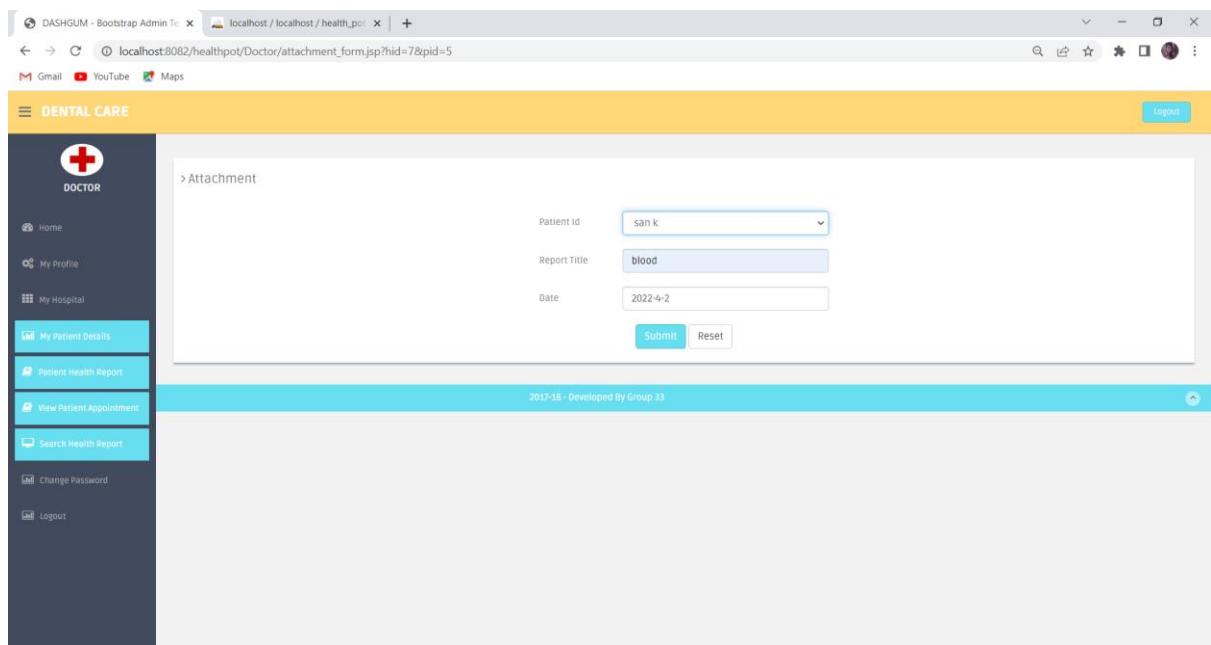
Screenshot of the Patient Medicine Report page. The table shows the following data:

Medicine	Morning	After noon	Night	Tot Tablets
Select medicine				
1	Dolo 500	1	1	30

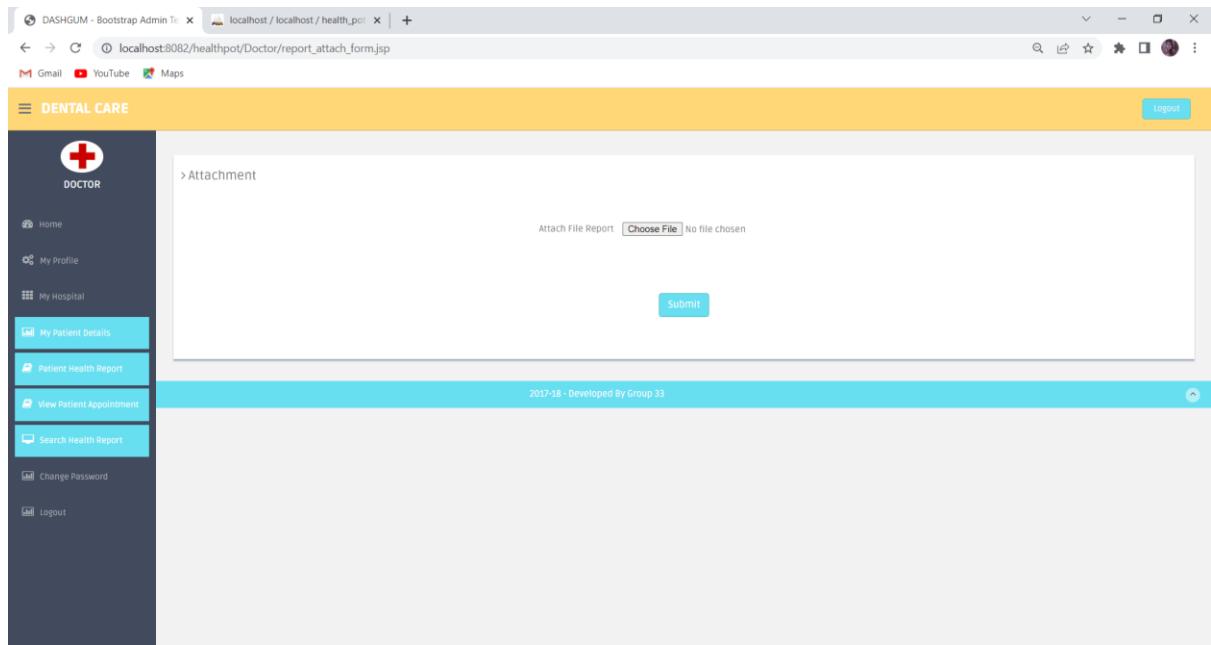
## Add new attachment :



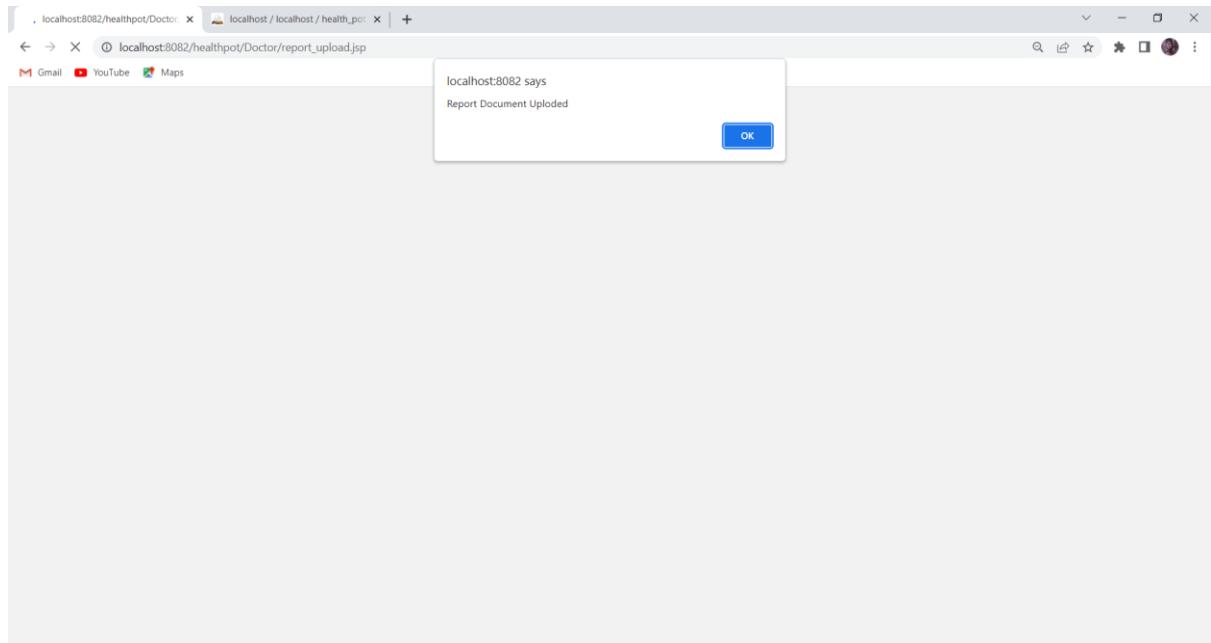
## Attachment :



## Attachment-Choose file



## Uploaded report :



## Delete :

The screenshot shows a web application interface for a dental care system. On the left is a dark sidebar with a doctor icon and various menu options: Home, My Profile, My Hospital, My Patient Details, Patient Health Report, View Patient Appointment, Search Health Report, Change Password, and Logout. The main content area has a yellow header bar with the text 'DENTAL CARE' and a 'Logout' button. Below this is a section titled 'Health Report' with a sub-section 'Health Report Details'. A blue button labeled 'Add New Health Report' is visible. A table lists three patient records:

Sl no	Doctor Name	Patient Name	Health Report Name	Diseases Name	Report 1	Report 2	Status	Date	Medicine	Reports Attached	Delete
1	Rohit	san k	Root canal	cavity	normal	normal	Minor	2022-04-02	Medicines	Reports Attached	Delete
2	Rohit	vinayak	Root canal	cavity	wisdom tooth cavity	wisdom tooth cavity	Normal	2022-03-07	Medicines	Reports Attached	Delete
3	Rohit	vinayak	Root Canal	cavity	wisdom tooth cavity	wisdom tooth cavity	Normal	2022-03-08	Medicines	Reports Attached	Delete

At the bottom of the main content area, there is a footer bar with the text '2017-18 - Developed By Group 33'.

**Value deleted successfully :**

The screenshot shows a confirmation dialog box centered on the screen. The dialog has a white background and a thin black border. Inside, the text 'localhost:8082 says' is at the top, followed by 'Values Deleted...'. At the bottom right is a blue 'OK' button. The background of the browser window is mostly gray, indicating it is inactive.

## Remaining values :

The screenshot shows a web browser window with the URL [localhost:8082/healthpot/Doctor/healthreport\\_view.jsp](http://localhost:8082/healthpot/Doctor/healthreport_view.jsp). The page has a yellow header bar with the text 'DENTAL CARE' and a 'Logout' button. On the left, there is a dark sidebar with a doctor icon and links: 'Home', 'My Profile', 'My Hospital', 'My Patient Details' (which is highlighted in blue), 'Patient Health Report', 'View Patient Appointment', 'Search Health Report', 'Change Password', and 'Logout'. The main content area is titled 'Health Report' and contains a sub-section 'Health Report Details' with a 'Add New Health Report' button. Below this is a table with the following data:

Sl no	Doctor Name	Patient Name	Health Report Name	Diseases Name	Report 1	Report 2	Status	Date	Medicine	Reports Attached	Delete
1	Rohit	vinayak	Root canal	cavity	wisdom tooth cavity	wisdom tooth cavity	Normal	2022-03-07	Medicines	Reports Attached	Delete
2	Rohit	vinayak	Root canal	cavity	wisdom tooth cavity	wisdom tooth cavity	Normal	2022-03-08	Medicines	Reports Attached	Delete

At the bottom of the page, it says '2017-18 - Developed By Group 33'.

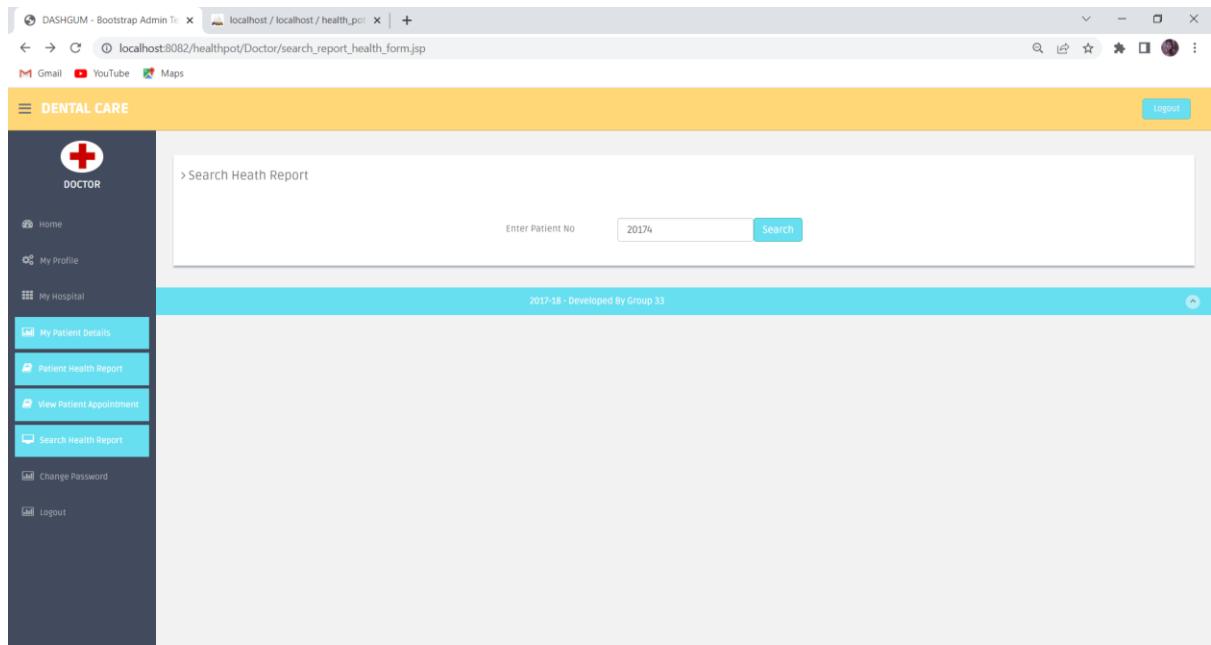
## Appointment details :

The screenshot shows a web browser window with the URL [localhost:8082/healthpot/Doctor/addappoint\\_view.jsp](http://localhost:8082/healthpot/Doctor/addappoint_view.jsp). The layout is identical to the previous screenshot, with a yellow header 'DENTAL CARE' and a 'Logout' button. The sidebar on the left includes 'My Patient Details' (highlighted in blue), 'Patient Health Report', 'View Patient Appointment', 'Search Health Report', 'Change Password', and 'Logout'. The main content area is titled 'Appointment' and contains a sub-section 'Appointment Details' with a table showing the following data:

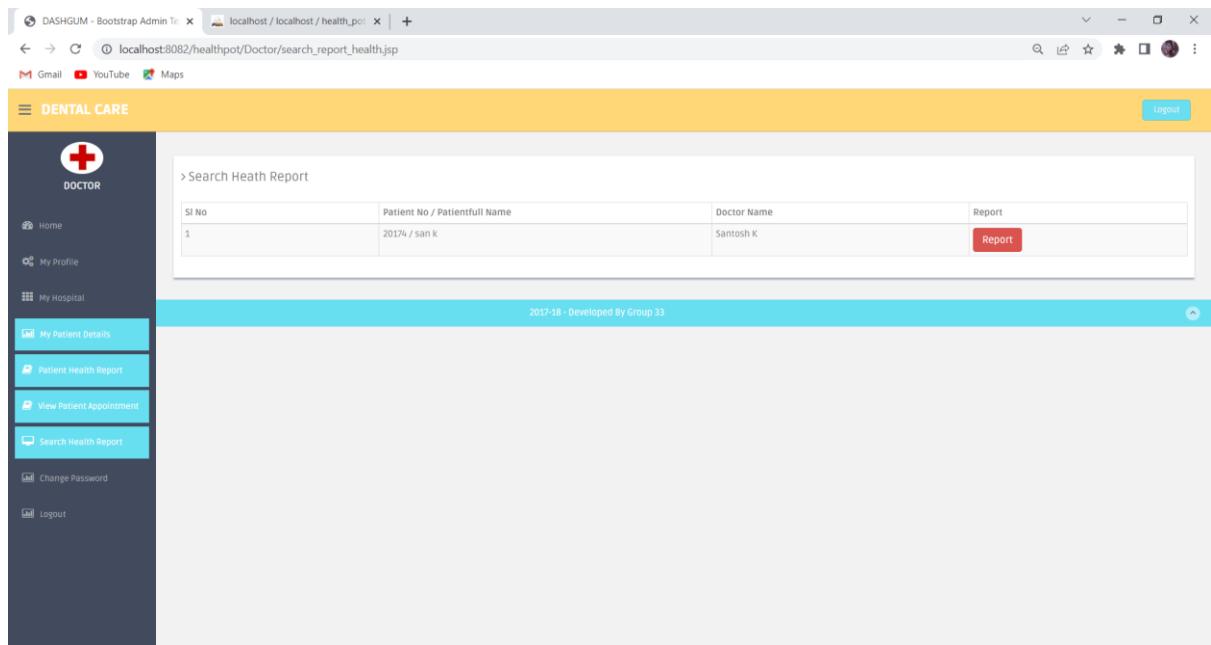
ID	Dr Name	Patientfull Name	Time	Date	Remarks	Status	Confirm
2	Rohit	san k	03:06:00	2022-03-06	Active	Pending	Confirm
3	Rohit	vinayak	02:13:00	2022-03-08	active	Pending	Confirm

At the bottom of the page, it says '2017-18 - Developed By Group 33'.

## Search health report :



## Searched value :



## Function Report:

DASHBOARD - Bootstrap Admin Template

localhost / localhost / health\_port / Doctor/search\_report\_health.jsp

☰ DENTAL CARE

Logout

> Search Health Report

SI No	Patient No / Patientfull Name	Doctor Name	Report
1	20174 / san k	Santosh K	<b>Report</b>

2017-18 - Developed By Group 33

## Report

DASHBOARD - Bootstrap Admin Template

localhost / localhost / health\_port / Doctor/search\_report\_health.jsp?hid=4

☰ DENTAL CARE

Logout

> Search Health Report

Patient No /	Patientfull Name	Doctor Name
20174	san k	Santosh K

Hospital Name

Health Report Name: Sugar  
Diseases Name: sugar low

Report 1: minor problem

Report 2: abcd

Date: 0000-00-00  
Status: Normal

Medicine Details

SI no	Medicine Name	Morning	After Noon	Night	Total Tablates	Notes
1	Dolo 500	1	1	1	20	New

## Reports :

The screenshot shows a web browser window with a yellow header bar containing the text "DENTAL CARE". On the left, there is a dark sidebar with a "DOCTOR" logo and several menu items: Home, My Profile, My Hospital, My Patient Details (which is highlighted in blue), Patient Health Report, View Patient Appointment, Search Health Report, Change Password, and Logout.

The main content area displays a report titled "Report 2" with the identifier "abcd". Below the title, there are fields for "Date" (0000-00-00) and "Status" (Normal). A table titled "Medicine Details" lists two entries:

Sl no	Medicine Name	Morning	After Noon	Night	Total Tablets	Notes
1	Dolo 500	1	1	1	20	New
2	Clapal	1	0	1	30	New

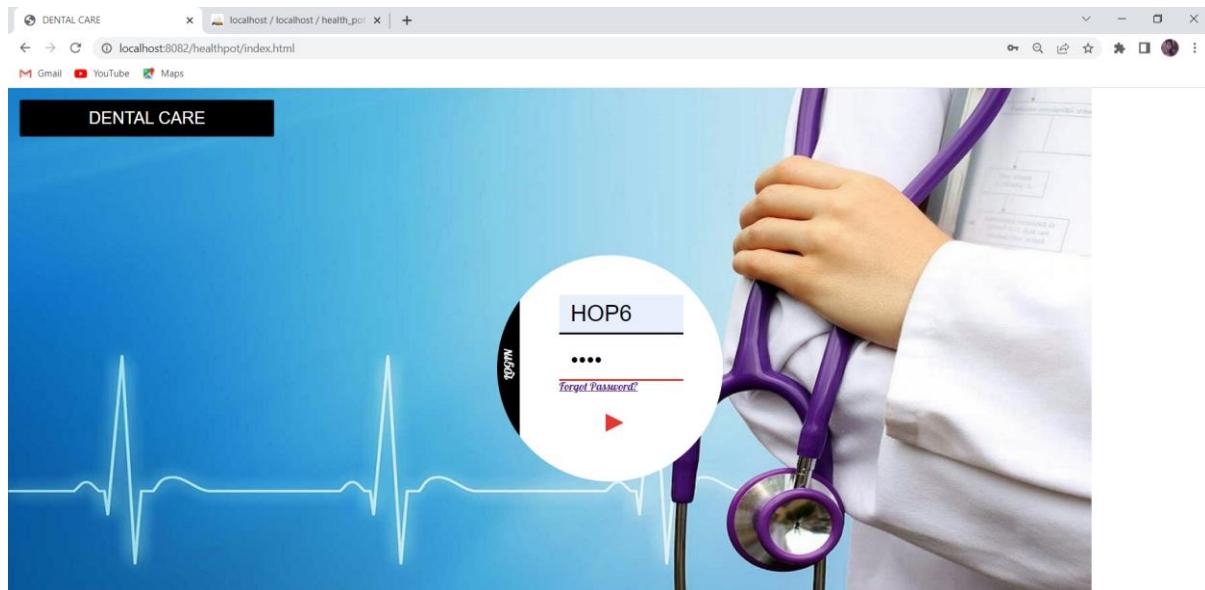
Below this is a section titled "Report Attached Details" containing a table with the following data:

Attachment Id	Patient Name	Report Title	Report Attached	Date
2	san k	abcd	Health Report	2017-04-20
4	san k	asqwewq	Health Report	2017-04-20
5	san k	scan	Health Report	2017-04-20
6	san k	X ray	Health Report	2018-01-02
7	san k	blood	Health Report	2022-03-05

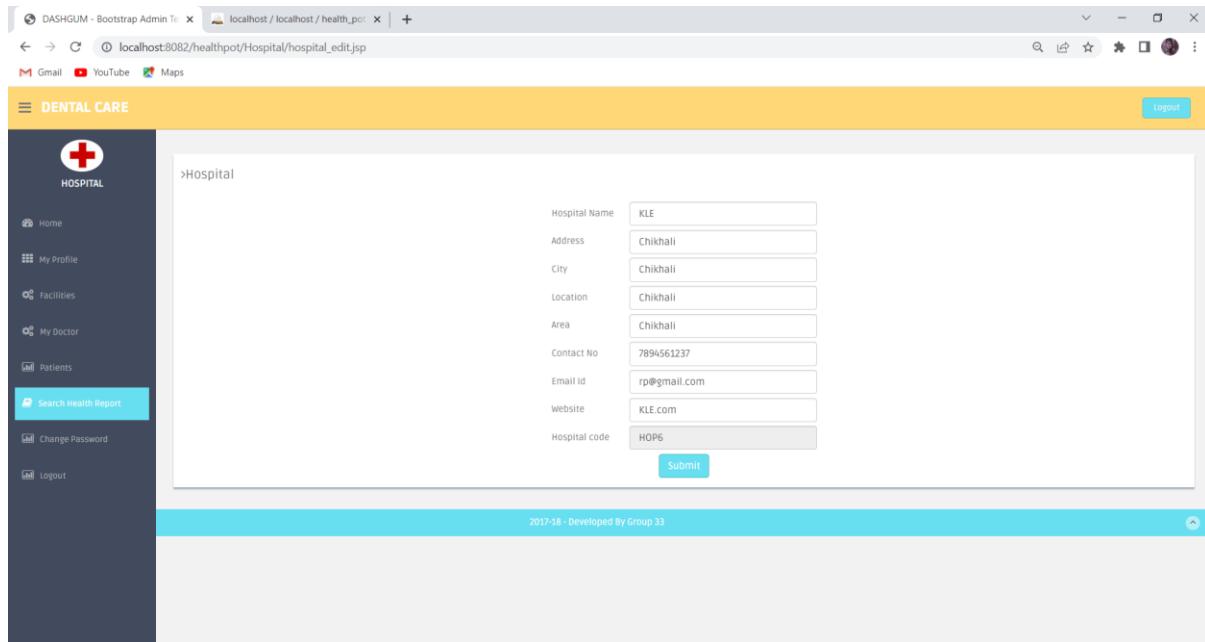
At the bottom of the page, a footer bar contains the text "2017-18 - Developed By Group 33".

## Hospital log in :

Login id:HOP6 , password :HOP6



## Profile :

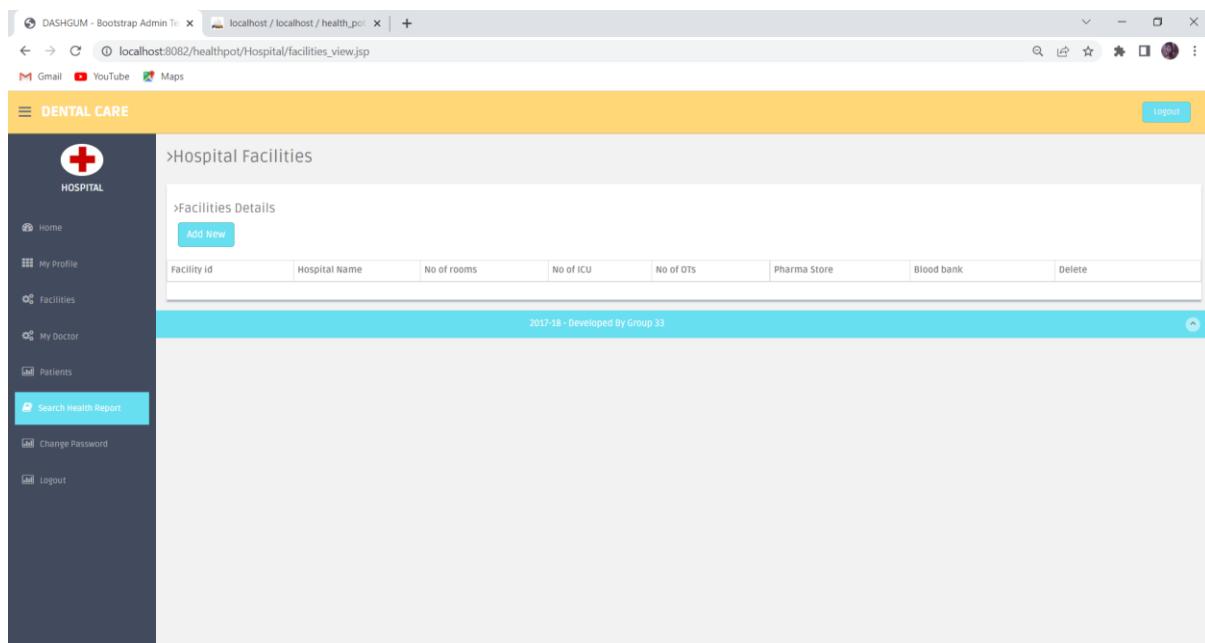


A screenshot of a web browser showing the 'Hospital' profile editing page. The URL is `localhost:8082/healthpot/Hospital/hospital_edit.jsp`. The page has a yellow header bar with the title 'DENTAL CARE' and a 'Logout' button. On the left is a dark sidebar with a red cross icon and the word 'HOSPITAL'. It contains links: Home, My Profile, Facilities, My Doctor, Patients, Search Health Report (which is highlighted in blue), Change Password, and Logout. The main content area shows a form for editing hospital details. The fields are as follows:

Hospital Name	KLE
Address	Chikhali
City	Chikhali
Location	Chikhali
Area	Chikhali
Contact No	7894561237
Email Id	rp@gmail.com
Website	KLE.com
Hospital code	HOP6

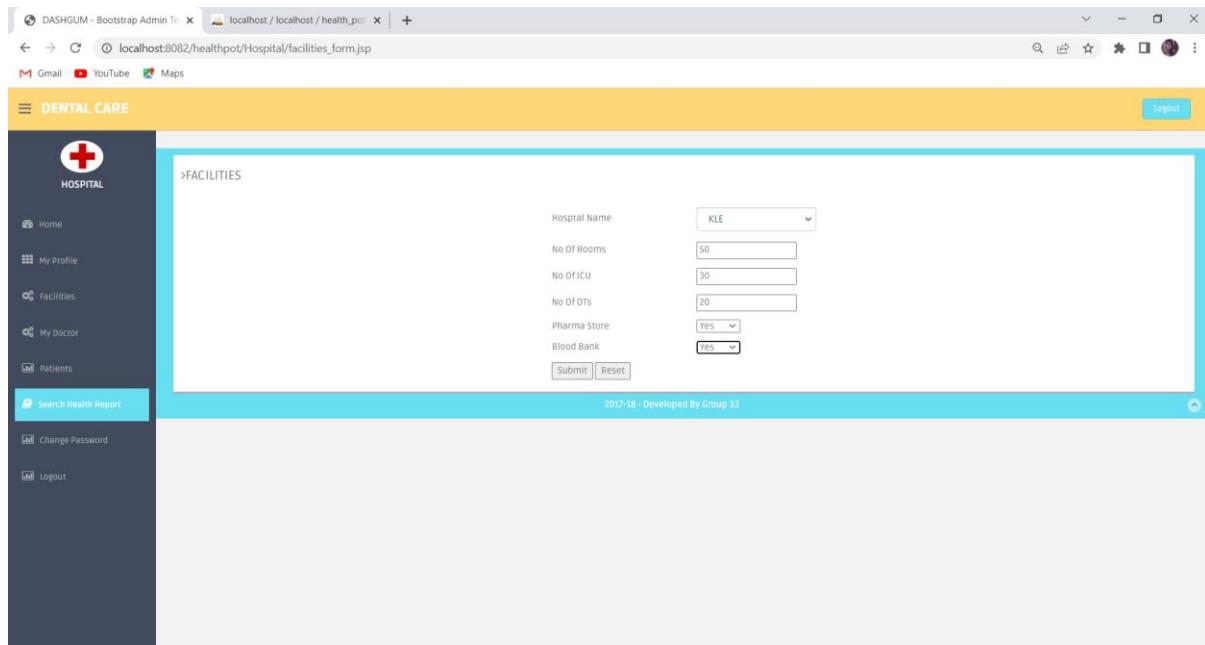
A 'Submit' button is at the bottom right of the form.

## Hospital Facilities :



A screenshot of a web browser showing the 'Facilities Details' page. The URL is `localhost:8082/healthpot/Hospital/facilities_view.jsp`. The page has a yellow header bar with the title 'DENTAL CARE' and a 'Logout' button. On the left is a dark sidebar with a red cross icon and the word 'HOSPITAL'. It contains links: Home, My Profile, Facilities (which is highlighted in blue), My Doctor, Patients, Search Health Report (highlighted in blue), Change Password, and Logout. The main content area shows a table titled 'Facilities Details' with an 'Add New' button. The table has columns: Facility Id, Hospital Name, No of rooms, No of ICU, No of OTS, Pharma Store, Blood bank, and Delete. A horizontal bar at the bottom of the content area says '2017-18 - Developed By Group 33'.

## Hospital Facilities :



DASHGUM - Bootstrap Admin Template

localhost / localhost / health\_port / localhost / healthpot / hospital / facilities\_form.jsp

Gmail YouTube Maps

Logout

DENTAL CARE

HOSPITAL

Home My Profile Facilities My Doctor Patients Search Health Report Change Password Logout

>FACILITIES

Hospital Name: KLE

No Of Rooms: 50

No Of ICUs: 30

No Of OTs: 20

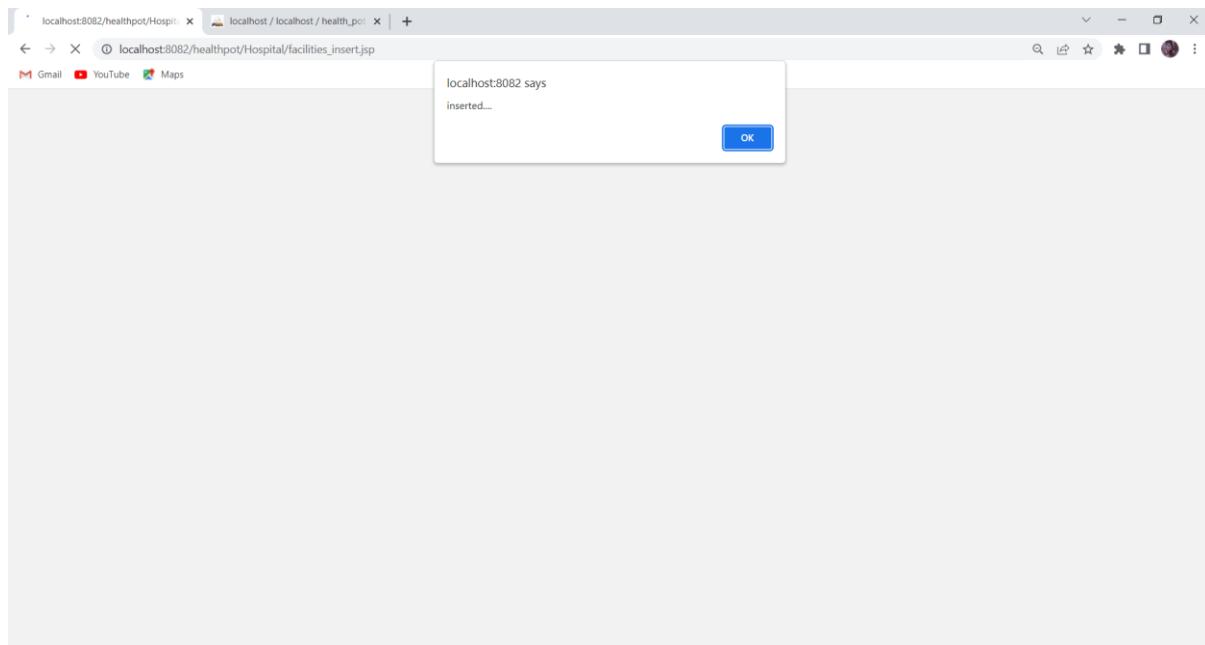
Pharma Store: Yes

Blood Bank: Yes

Submit Reset

2017-18 - Developed By Group 33

## Values inserted :



## Updated values :

The screenshot shows a web browser window with the URL [localhost:8082/healthpot/Hospital/facilities\\_view.jsp](http://localhost:8082/healthpot/Hospital/facilities_view.jsp). The page title is "DENTAL CARE". On the left, there is a sidebar with a hospital logo and links: Home, My Profile, Facilities, My Doctor, Patients, Search Health Report, Change Password, and Logout. The main content area is titled "Hospital Facilities" and "Facilities Details". It contains a table with one row:

Facility Id	Hospital Name	No of rooms	No of ICU	No of OTS	Pharma Store	Blood bank	Delete
6	KLE	50	30	20	Yes	Yes	<a href="#">Delete</a>

At the bottom of the page, it says "2017-18 - Developed By Group 33".

## Doctors details :

The screenshot shows a web browser window with the URL [localhost:8082/healthpot/Hospital/doctor\\_view.jsp](http://localhost:8082/healthpot/Hospital/doctor_view.jsp). The page title is "DENTAL CARE". On the left, there is a sidebar with a hospital logo and links: Home, My Profile, Facilities, My Doctor, Patients, Search Health Report, Change Password, and Logout. The main content area is titled "Doctor" and "Doctor Details". It contains a table with one row:

Doctor Id	Doctor Name	Designation	Hospital Id	Email Id	Contact No	Doctor code	Delete	Edit
4	Rohit	MBBS	6	rohit@gmail.com	123456780	DOC4	<a href="#">Delete</a>	<a href="#">Edit</a>

At the bottom of the page, it says "2017-18 - Developed By Group 33".

## Doctors values

### Function :add new

#### Edit

The screenshot shows a web browser window with the URL `localhost:8082/healthpot/Hospital/doctor_form.jsp`. The page has a yellow header bar with the text 'DENTAL CARE' and a 'Logout' button. On the left, there is a dark sidebar with icons for Home, My Profile, Facilities, My Doctor, Patients, and a 'Search Health Report' button. The main content area is titled '>DOCTOR'. It contains a form with the following fields:

Hospital Id	KLE
Doctor Name	Rutuja
Designation	bds
Email Id	rutja@gmail.com
Contact No	1234567890
Doctor Code	DOC5

At the bottom of the form are 'Submit' and 'Reset' buttons.

### Updated values :

The screenshot shows a web browser window with the URL `localhost:8082/healthpot/Hospital/doctor_view.jsp`. The page has a yellow header bar with the text 'DENTAL CARE' and a 'Logout' button. On the left, there is a dark sidebar with icons for Home, My Profile, Facilities, My Doctor, Patients, and a 'Search Health Report' button. The main content area is titled '>Doctor'. It displays a table titled 'Doctor Details' with the following data:

Doctor Details								
<a href="#">Add New</a>								
Doctor Id	Doctor Name	Designation	Hospital Id	Email Id	Contact No	Doctor code	Delete	Edit
4	Rohit	MBBS	6	rohit@gmail.com	123456780	DOC4	<a href="#">Delete</a>	<a href="#">Edit</a>
5	Rutuja	bds	6	rutja@gmail.com	1234567890	DOC5	<a href="#">Delete</a>	<a href="#">Edit</a>

At the bottom of the table is the text '2017-18 - Developed By Group 33'.

## Function : doctors details

Enter patient id:20174

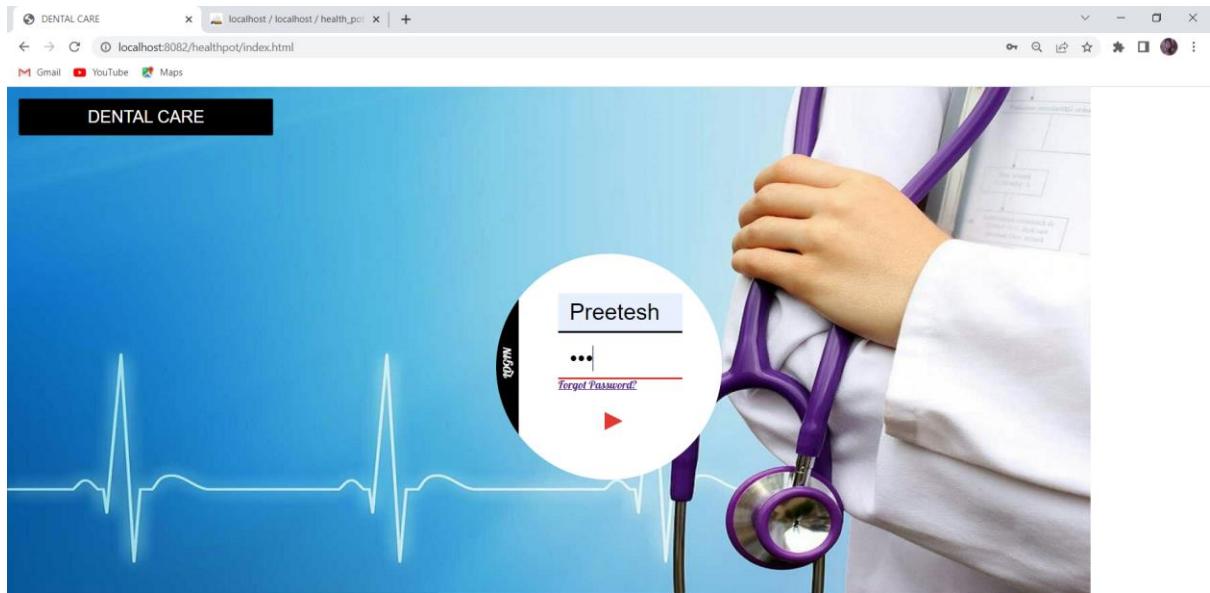
The screenshot shows a web application interface for a dental care system. The top navigation bar includes links for 'DASHGUM - Bootstrap Admin Tool' and 'localhost / localhost / health\_poi'. Below the bar, the URL 'localhost:8082/healthpot/Hospital/search\_report\_health.jsp' is visible. The main content area has a yellow header bar with the text 'DENTAL CARE' and a 'Logout' button. On the left, a dark sidebar menu lists 'Home', 'My Profile', 'Facilities', 'My Doctor', 'Patients', and a highlighted 'Search Health Report' option. The central search form is titled 'Search Health Report' and contains fields for 'SI No' (1), 'Patient No / Patientfull Name' (20174 / san k), 'Doctor Name' (Santosh K), and a red 'Report' button. A footer bar at the bottom displays the text '2017-18 - Developed By Group 33'.

## Report details:

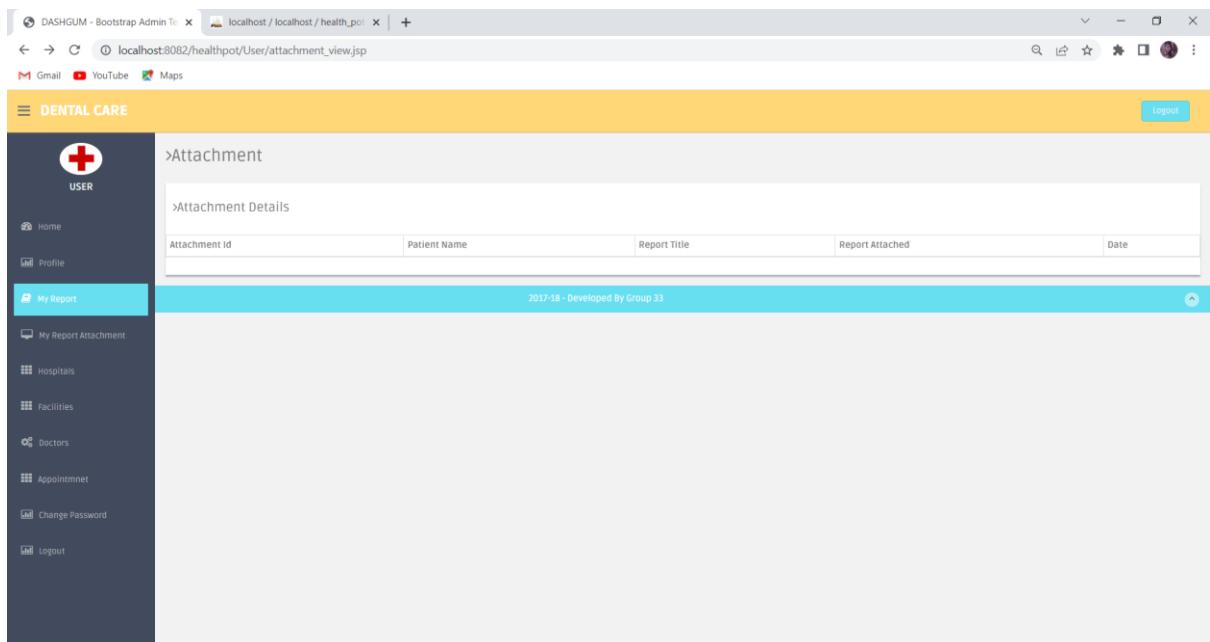
This screenshot shows the same web application interface as the previous one, but the 'Search Health Report' section is expanded. It displays a table for 'Medicine Details' and a table for 'Report Attached Details'. The 'Medicine Details' table has columns for Si no, Medicine Name, Morning, After Noon, Night, Total Tablates, and Status. It shows two rows: one for Dolo 500 (Total Tablates 20, Status New) and another for Clapal (Total Tablates 30, Status New). The 'Report Attached Details' table has columns for Attachment Id, Patient Name, Report Title, Report Attached, and Date. It lists seven attachments for patient 'san k': attachment 2 (abcd, Health Report, 2017-04-20), attachment 4 (asqwewq, Health Report, 2017-04-20), attachment 5 (scan, Health Report, 2017-04-20), attachment 6 (x ray, Health Report, 2018-01-02), and attachments 7, 8, 9, 10 (blood, Health Report, 2022-03-05). The footer bar at the bottom displays the text '2017-18 - Developed By Group 33'.

## Patient log in

Log id:Preetesh password:123



## Profile/dashboard patients :



## Hospital details :

The screenshot shows a web browser window with the URL [localhost:8082/healthpot/User/hospital\\_view.jsp](http://localhost:8082/healthpot/User/hospital_view.jsp). The page title is "DENTAL CARE". On the left, there is a sidebar with a user icon and links: Home, Profile, My Report (highlighted in blue), My Report Attachment, Hospitals, Facilities, Doctors, Appointments, Change Password, and Logout. The main content area has a yellow header "Hospital". Below it, a sub-header "Hospital Details" is followed by a table with two rows of data:

Hospital Id	Hospital Name	Address	City	Location	Area	Contact No	Email Id	Website	Hospital Code
6	KLE	Chikhali	Chikhali	Chikhali	Chikhali	-695373355	rp@gmail.com	KLE.com	HOP6
7	KLE	nigadi	Pune	Nigadi	Nigadi	1234567897	rp@gmail.com	KLE.com	HOP7

At the bottom, a footer bar displays "2017-18 - Developed By Group 33".

## Facilities :

The screenshot shows a web browser window with the URL [localhost:8082/healthpot/User/facilities\\_view.jsp](http://localhost:8082/healthpot/User/facilities_view.jsp). The page title is "DENTAL CARE". On the left, there is a sidebar with a user icon and links: Home, Profile, My Report (highlighted in blue), My Report Attachment, Hospitals, Facilities, Doctors, Appointments, Change Password, and Logout. The main content area has a yellow header "Hospital Facilities". Below it, a sub-header "Facilities Details" is followed by a table with one row of data:

Facility Id	Hospital Name	No of rooms	No of ICU	No of OTs	Pharma Store	Blood bank
6	KLE	50	30	20	Yes	Yes

At the bottom, a footer bar displays "2017-18 - Developed By Group 33".

## Doctors details :

The screenshot shows a web browser window with the URL `localhost:8082/healthpot/User/doctor_view.jsp`. The page has a yellow header bar with the text 'DENTAL CARE' and a 'Logout' button. On the left, there is a dark sidebar with a red cross icon and the word 'USER'. The sidebar contains links: Home, Profile, My Report (which is highlighted in blue), My Report Attachment, Hospitals, Facilities, Doctors (highlighted in blue), Appointment, Change Password, and Logout. The main content area is titled '>Doctor' and has a sub-section '>Doctor Details'. It displays a table with the following data:

Doctor Id	Doctor Name	Designation	Hospital Id	Email Id	Contact No	Doctor code
4	Rohit	MBBS	6	rohit@gmail.com	123456780	DOC4
5	Rutuja	bds	6	rutuja@gmail.com	1234567890	DOC5

At the bottom of the page, a cyan footer bar displays the text '2017-18 - Developed By Group 33'.

## Appointment details :

The screenshot shows a web browser window with the URL `localhost:8082/healthpot/User/addappoint_view.jsp`. The layout is identical to the Doctor Details page, with a yellow header bar, a dark sidebar with a red cross icon and 'USER' text, and a cyan footer bar. The sidebar links are: Home, Profile, My Report (highlighted in blue), My Report Attachment, Hospitals, Facilities, Doctors (highlighted in blue), Appointment (highlighted in blue), Change Password, and Logout. The main content area is titled '>Appointment' and has a sub-section '>Appointment Details'. It displays a table with the following data:

ID	Dr Name	Patientfull Name	Time	Date	Remarks	Status

At the bottom of the page, a cyan footer bar displays the text '2017-18 - Developed By Group 33'.

## Appointment details :

The screenshot shows a web-based application interface for managing appointments. The top navigation bar includes links for 'DASHGUM - Bootstrap Admin Template' and 'localhost / localhost / health\_pos'. Below the bar, there are links for 'Gmail', 'YouTube', and 'Maps'. The main header 'DENTAL CARE' is displayed above a yellow navigation bar containing a user icon and a 'Logout' button. On the left, a dark sidebar menu lists various options: Home, Profile, My Report (selected), My Report Attachment, Hospitals, Facilities, Doctors, Appointments (selected), Change Password, and Logout. The central content area is titled 'Appointment' and contains a form titled 'ADD APPOINT'. The form fields include: 'Select Doctor' (dropdown menu set to 'Rutuja'), 'Timings' (dropdown menu set to '20:22'), 'Date' (text input set to '02-04-2022'), and 'Remarks' (text input containing 'abcd'). At the bottom of the form are 'Submit' and 'Reset' buttons. A footer bar at the bottom of the page displays the text '2017-18 - Developed By Group 33'.

## Validation checks :

### Doctors log in Validations :

#### Patient details

The screenshot shows a web application interface for a doctor's patient details. The left sidebar has a 'DENTAL CARE' header and a 'DOCTOR' icon. The main content area is titled 'Patient'. It contains fields for Hospital Name (KLE), Patient No (20227), Patient Full Name (empty), Gender (radio buttons for Male and Female), DOB (dd-mm-yyyy), Address (empty), City (empty), Contact No (empty), Email Id (empty), and a 'Submit' button. Red validation error boxes appear next to each required field: 'Patient No' with 'This field is required' and 'Letters only', 'DOB' with 'This field is required' and 'Letters only', 'Address' with 'This field is required' and 'Letters only', 'City' with 'This field is required' and 'Invalid mobile number', and 'Email Id' with 'This field is required' and 'Invalid email address'. The footer says '2017-18 - Developed By Group 33'.

#### Health report details

The screenshot shows a web application interface for a doctor's health report details. The left sidebar has a 'DENTAL CARE' header and a 'DOCTOR' icon. The main content area is titled 'Healthreport'. It contains fields for Doctor (dropdown menu with Rohit selected), Select Patient Name (dropdown menu with '-----Select Patient-----'), Health Report Name (empty), Diseases Name (empty), Report1 (empty), Report2 (empty), Status (dropdown menu with 'Select Status'), and Date (2022-4-2). Red validation error boxes appear next to each required field: 'Select Patient Name' with 'This field is required' and 'Letters only', 'Health Report Name' with 'This field is required' and 'Letters only', 'Diseases Name' with 'This field is required' and 'Letters only', 'Report1' with 'This field is required' and 'Letters only', and 'Report2' with 'This field is required' and 'Letters only'. The footer says '2017-18 - Developed By Group 33'.

## Admin validations :

### Hospital information

The screenshot shows a web browser window with the URL `localhost:8082/healthpot/Admin/hospital_form.jsp`. The page title is "DENTAL CARE". On the left, there is a sidebar with a red cross icon and the word "ADMIN". The main content area has a heading ">Hospital". There are several input fields for hospital details: Hospital Name, Address, City, Location, Area, Contact No., Email Id, Website, and Hospital code. Each of these fields has a red validation box with the following errors:

- Hospital Name: \* This field is required  
\* Letters only
- Address: \* This field is required  
\* Letters only
- City: \* This field is required  
\* Letters only
- Location: \* This field is required  
\* Letters only
- Area: \* This field is required  
\* Invalid mobile number
- Contact No.: \* This field is required  
\* Invalid email address
- Email Id: \* This field is required
- Website: \* This field is required
- Hospital code: \* This field is required

At the bottom right of the form are "Submit" and "Reset" buttons. A footer bar at the bottom of the page says "2022 - Developed by Group No 33".

### Hospital information validation :

The screenshot shows a web browser window with the URL `localhost:8082/healthpot/Hospital/doctor_form.jsp`. The page title is "DENTAL CARE". On the left, there is a sidebar with a red cross icon and the word "HOSPITAL". The main content area has a heading ">Doctor". There are several input fields for doctor details: Hospital Id, Doctor Name, Designation, Email Id, Contact No., and Doctor Code. Each of these fields has a red validation box with the following errors:

- Hospital Id: \* This field is required  
\* Letters only
- Doctor Name: \* This field is required  
\* Letters only
- Designation: \* This field is required  
\* Invalid email address
- Email Id: \* This field is required  
\* Invalid mobile number
- Contact No.: \* This field is required
- Doctor Code: \* This field is required

At the bottom right of the form are "Submit" and "Reset" buttons. A footer bar at the bottom of the page says "2017-18 - Developed By Group 33".

**Sample code :**

**Db.connect**

```
package hpo;  
import java.sql.*;  
public class dbconnect  
{  
    private Connection con;  
    public Statement stmt;  
    public String getconn()  
    {  
        try  
        {  
            Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");  
            con=DriverManager.getConnection("jdbc:odbc:hospital");  
            stmt=con.createStatement();  
        }  
        catch(Exception e)  
        {  
            System.out.println(e);  
        }  
        return " ";  
    }  
}
```

### Hospital update :

```
<%@page import="java.sql.*"%>
<%@page import="hpo.dbconnect"%>
<jsp:useBean id="a" class="hpo.dbconnect"/>
<jsp:getProperty name="a" property="conn"/>
<%
String s1,s2,s3,s4,s5,s6,s7,s8,s9,s10;

s10=request.getParameter("hospitalid");
s1=request.getParameter("hospitalname");
s2=request.getParameter("address");
s3=request.getParameter("city");
s4=request.getParameter("location");
s5=request.getParameter("area");
s6=request.getParameter("contactno");
s7=request.getParameter("emailid");
s8=request.getParameter("website");
s9=request.getParameter("hospitalcode");

int k=a.stmt.executeUpdate("update hospital set
hospitalname='"+s1+"',address='"+s2+"',city='"+s3+"',location='"+s4+"',area='"+s5+
"',contactno='"+s6+"',emailid='"+s7+"',website='"+s8+"',hospitalcode='"+s9+"' where
hospitalid='"+s10+"');");
%>
<script>
alert('Values updated....');
document.location="hospital_view.jsp";
</script>
```

## **Doctor view**

```
<!DOCTYPE html>

<html lang="en">
  <head>
    <jsp:include page="meta.jsp"></jsp:include>
  </head>

  <body>

    <section id="container" >
      <!--
*****
***** -->
      TOP BAR CONTENT & NOTIFICATIONS
*****
***** -->

      <!--header start-->
      <header class="header black-bg">
        <jsp:include page="header.jsp"></jsp:include>

      </header>
      <!--header end-->

      <!--
*****
***** -->
    
```

## MAIN SIDEBAR MENU

```
*****  
*****  
**** -->  
  
<!--sidebar start-->  
  
<aside>  
  
  <div id="sidebar" class="nav-collapse ">  
    <!-- sidebar menu start-->  
  
    <jsp:include page="side_bar.jsp"></jsp:include>  
  
    <!-- sidebar menu end-->  
  
  </div>  
  
</aside>  
  
<!--sidebar end-->  
  
  
  <!--  
*****  
*****  
***
```

## MAIN CONTENT

```
*****  
*****  
**** -->  
  
<!--main content start-->  
  
<section id="main-content">  
  
  <section class="wrapper">  
    <h3><i class="fa fa-angle-right"></i>Doctor</h3>  
  
    <div class="row mt">
```

```

<div class="col-lg-12">

    <div class="content-panel">

        <h4><i class="fa fa-angle-right"></i>Doctor Details</h4>&nbsp;&nbsp;&nbsp;&nbsp;

        <a href="doctor_form.jsp" class="btn btn-theme">Add New</a><br><br>

        <section id="unseen">

            <table class="table table-bordered table-striped table-condensed">

                <thead>

                    <tr>

                        <th width="47">Doctor Id </th>

                        <th width="47">Doctor Name </th>

                        <th width="74">Designation </th>

                        <th width="54">Hospital Id</th>

                        <th width="37">Email Id</th>

                        <th width="52">Contact No</th>

                        <th width="47">Doctor code</th>

                        <th width="39">Delete</th>

                        <th width="41">Edit</th>

                    </tr>

                </thead>

                <tbody>

                    <%@page import="java.sql.*"%>

                    <%@page import="hpo.dbconnect"%>

                    <jsp:useBean id="a" class="hpo.dbconnect"/>

                    <jsp:getProperty name="a" property="conn"/>

                    <%

```

```

String uname=session.getAttribute("uname").toString();

ResultSet rs=a.stmt.executeQuery("select *from doctor d,hospital h where
d.hospitalid=h.hospitalid and h.hospitalcode='"+uname+"'");

while(rs.next())
{
%>

<tr>

<td><%=rs.getInt("doctorid")%></td>
<td><%=rs.getString("doctornoame")%></td>
<td><%=rs.getString("designation")%></td>
<td><%=rs.getInt("hospitalid")%></td>
<td><%=rs.getString("emailid")%></td>
<td><%=rs.getString("contactno")%></td>
<td><%=rs.getString("doctorcode")%></td>

<td><a href="doctor_delete.jsp?delete=<%=rs.getInt("doctorid")%>">Delete</a></td>
<td><a href="doctor_edit.jsp?a_id=<%=rs.getInt("doctorid")%>">Edit</a></td>
</tr>
<% } %>
</tbody>
</table>
</section>

</div><!-- /content-panel -->
</div><!-- /col-lg-4 -->
</div><!-- /row -->

</section><! --/wrapper -->
</section><!-- /MAIN CONTENT -->

```

```

<!--main content end-->

<!--footer start-->

<jsp:include page="footer.jsp"></jsp:include>

```

### **Health report insert :**

```

<%@page import="java.sql.*"%>

<%@page import="hpo.dbconnect"%>

<jsp:useBean id="a" class="hpo.dbconnect"/>

<jsp:getProperty name="a" property="conn"/>

<%

String s1,s2,s3,s4,s5,s6,s7,s8,s9,s10;

s1=request.getParameter("doctorid");
s2=request.getParameter("patientid");
s3=request.getParameter("healthreport_name");
s4=request.getParameter("diseasesname");
s5=request.getParameter("report1");
s6=request.getParameter("report2");
s7=request.getParameter("medicines");
s8=request.getParameter("date");
s9=request.getParameter("checkup");
s10=request.getParameter("status");

```

```

int          k=a.stmt.executeUpdate("insert      into      healthreport
values(null,'" +s1+ "','" +s2+ "','" +s3+ "','" +s4+ "','" +s5+ "','" +s6+ "','" +s7+ "','" +s8+ "','" +s9+ "','" +s10+ "')");

```

```
%>

<script>

alert('Values Inserted....');

document.location="healthreport_form.jsp";

</script>
```

**Search health :**

```
<!DOCTYPE html>

<html lang="en">

<head>

<jsp:include page="meta.jsp"></jsp:include>

</head>

<body>
```

```
<section id="container" >
```

```
    <!--
*****
***** -->
```

## **TOP BAR CONTENT & NOTIFICATIONS**

```
*****
***** -->
```

```
<!--header start-->

<header class="header black-bg">

<jsp:include page="header.jsp"></jsp:include>

</header>
```

```
<!--header end-->
```

```
<!--
```

```
*****  
*****  
*****
```

## MAIN SIDEBAR MENU

```
*****  
*****  
***** -->
```

```
<!--sidebar start-->
```

```
<aside>
```

```
 <div id="sidebar" class="nav-collapse ">
```

```
   <!-- sidebar menu start-->
```

```
<jsp:include page="side_bar.jsp"></jsp:include>
```

```
   <!-- sidebar menu end-->
```

```
 </div>
```

```
</aside>
```

```
<!--sidebar end-->
```

```
<!--
```

```
*****  
*****  
*****
```

## MAIN CONTENT

```
*****  
*****  
***** -->
```

```
<!--main content start-->
```

```

<section id="main-content">
    <section class="wrapper">
        <div class="row mt">
            <div class="col-lg-12">
                <div class="form-panel">
                    <h4 class="mb"><i class="fa fa-angle-right"></i> Search Heath Report
                </h4>
                <%@page import="java.sql.*"%>
                <%@page import="hpo.dbconnect"%>
                <jsp:useBean id="a" class="hpo.dbconnect"/>
                <jsp:getProperty name="a" property="conn"/>

                <table class="table table-bordered table-striped table-condensed">
                    <thead>
                        <tr>
                            <th width="110" >Sl No</th>
                            <th width="185">Patient No / Patientfull Name</th>
                            <th width="143">Doctor Name</th>
                            <th width="121">Report</th>
                        </tr>
                    </thead>
                    <tbody>
                        <%
                            int sl=0;
                            String patient_no=request.getParameter("patient_no");
                            String patientid=request.getParameter("patientid");
                        %>
                    </tbody>
                </table>
            </div>
        </div>
    </section>
</section>

```

```

ResultSet rs=a(stmt.executeQuery("select *from healthreport hr,doctor d,patient p
where hr.patientid=p.patientid and d.doctorid=hr.doctorid and
p.patientno='"+patient_no+" '");

while(rs.next())
{
    sl=sl+1;
    %>
</option>

<tr>
    <td width="110" ><%=sl%></td>
    <td width="185"><%=rs.getString("patientno")%> /<%=rs.getString("patientfull_name")%></td>
    <td width="143"><%=rs.getString("doctorname")%></td>
    <td width="121"><a href="search_report_heath_next.jsp?hid=<%=rs.getInt("healthid")%>" class="btn btn-danger">Report</a></td>
</tr>
<%
}
%></tbody>
</table>

</div>
</div><!-- col-lg-12-->

```

```
</div><!-- /row -->

</section><! --/wrapper -->

</section><!-- /MAIN CONTENT -->

<!--main content end-->

<!--footer start-->

<jsp:include page="footer.jsp"></jsp:include>
<jsp:include page="val.jsp"></jsp:include>
```

#### Patient edit :

```
<!DOCTYPE html>
<html lang="en">
<head>
<jsp:include page="meta.jsp"></jsp:include>
</head>

<body>
```

```
<section id="container" >
```

```
<!--
*****
*****
****
```

#### TOP BAR CONTENT & NOTIFICATIONS

```

***** -->

<!--header start-->

<header class="header black-bg">
<jsp:include page="header.jsp"></jsp:include>
</header>

<!--header end-->




<!--
***** -->

***** -->
****

MAIN SIDEBAR MENU

***** -->

<!--sidebar start-->

<aside>

<div id="sidebar" class="nav-collapse ">
<!-- sidebar menu start-->

<jsp:include page="side_bar.jsp"></jsp:include>

<!-- sidebar menu end-->

</div>

</aside>

<!--sidebar end-->

```

```

<!--
*****
*****
****

MAIN CONTENT

*****
*****
**** -->

<!--main content start-->

<section id="main-content">

<section class="wrapper">

<div class="row mt">

    <div class="col-lg-12">

        <div class="form-panel">

            <h4 class="mb"><i class="fa fa-angle-right"></i>Patient</h4>

            <jsp:include page="val.jsp"></jsp:include>

            <%@page import="java.sql.*"%>

<%@page import="hpo.dbconnect"%>

<jsp:useBean id="a" class="hpo.dbconnect"/>

<jsp:getProperty name="a" property="conn"/>

<%
String id=request.getParameter("a_id");

ResultSet rs=a.stmt.executeQuery("select *from patient where patientid='"+id+"'");

rs.next();

%>

<form    name="form1"    method="post"    action="patient_update.jsp"
id="formID" class="form-horizontal">

```

```

<table width="460" height="347" border="0" align="center">

<input name="patientid" type="hidden" id="patientid"
value="<%="rs.getInt("patientid")%>">

<tr>

<td width="122">Patient No</td>

<td width="328"><input name="patientno" type="text" id="patientno"
value="<%="rs.getInt("patientno")%>" class="validate[required,custom[onlyNumber]]"
form-control"></td>

</tr>

<tr>

<td>Patient Name </td>

<td><input name="patientname" type="text" id="patientname"
value="<%="rs.getInt("patientname")%>">
class="validate[required,custom[onlyLetter]] form-control"></td>

</tr>

<tr>

<td>Patient Full Name </td>

<td><input name="patientfull_name" type="text" id="patientfull_name"
value="<%="rs.getString("patientfull_name")%>">
class="validate[required,custom[onlyLetter]] form-control"></td>

</tr>

<tr>

<td>Gender</td>

<td><input name="gender" type="text" id="gender"
value="<%="rs.getString("gender")%>" class="validate[required,custom[onlyLetter]]"
form-control"></td>

</tr>

<tr>

<td>DOB</td>

```

```

<td><input name="dob" type="text" id="dob"
value="<%="rs.getString("dob")%>" class="validate[required,custom[date]] form-control"></td>

</tr>

<tr>

<td>Address</td>

<td><input name="address" type="text" id="address"
value="<%="rs.getString("address")%>" class="validate[required,custom[onlyLetter]] form-control"></td>

</tr>

<tr>

<td>City</td>

<td><input name="city" type="text" id="city"
value="<%="rs.getString("city")%>" class="validate[required,custom[onlyLetter]] form-control"></td>

</tr>

<tr>

<td>Contact No</td>

<td><input name="contactno" type="text" id="contactno"
value="<%="rs.getInt("contactno")%>" class="validate[required,custom[mobile]] form-control"></td>

</tr>

<tr>

<td>Email Id </td>

<td><input name="emailid" type="text" id="emailid"
value="<%="rs.getString("emailid")%>" class="validate[required,custom[email]] form-control"></td>

</tr>

<tr>

<td colspan="2"><div align="center">

<input type="submit" name="Submit" value="Submit" class="btn btn-theme">

```

```
<input type="reset" name="Reset" value="Reset" class="btn btn-default">
</div></td>
</tr>
</table>
</form>
</body>
</html>
</div>
</div><!-- col-lg-12-->
</div><!-- /row -->

</section><!-- /wrapper -->
</section><!-- /MAIN CONTENT -->

<!--main content end-->
<!--footer start-->

<jsp:include page="footer.jsp"></jsp:include>
<jsp:include page="val.jsp"></jsp:include>
```

## **Implementation n maintenance :**

The goal of the coding phase is to translate the design into code in the given programming language. The coding steps translate the detailed design of the system into programming language. The translation process continues when complier accepts source code as input and produces machine dependent object code as output. Linking of object files are done to produce the machine code. Internal documentation is another important factor, to facilitate other to understand the code and the logic

## **Code review and walk through:**

Both reviews and walk through used to deliver the correct codes. The code review is done as soon as code is ready to be executed, this is to reduce syntax errors and also check the coding standard.

## **Module Specification:**

The modules specified in the design are implemented using various ".html", "jsp" and "class" files. These files in the source code shares the common routines and share the data structure, to establish the hierarchical relationship.

## **Compilation and Building the executable:**

The source code for the system organized in various files is compiled using the "java" utility provided in the JAVA. The application is made to run in web browser the address as "<http://localhost:8080/staff>" present in ROOT directory of Tomcat Server.

## **Running the package:**

The following steps are undertaken to execute this application- First start Tomcat Server. • Open any Web Browser like Google Chrome, Mozilla Firefox. Type the following address in address bar of Web browser. <http://localhost:8080/staff> Now the Home page of application is displayed on screen. If new registration is there then register or sign up first and use the application. If already registered then directly logon into the system.

### **Java:**

Java is a computer programming language that is concurrent, class-based, object-oriented, and specifically designed to have as few implementation dependencies as possible. It is intended to let application developers "write once, run anywhere" (WORA), meaning that code that runs on one platform does not need to be recompiled to run on another. Java applications are typically compiled to byte code (class file) that can run on any Java virtual machine (JVM) regardless of computer architecture. Java is, as of 2014, one of the most popular programming languages in use, particularly for client-server web applications, with a reported 9 million developers. Java was originally developed by James Gosling at Sun Microsystems (which has since merged into Oracle Corporation) and released in 1995 as a core component of Sun Microsystems' Java platform. The language derives much of its syntax from C and C++, but it has fewer low-level facilities than either of them.

The original and reference implementation Java compilers, virtual machines, and class libraries were developed by Sun from 1991 and first released in 1995. As of May 2007, in compliance with the specifications of the Java Community Process, Sun relicensed most of its Java technologies under the GNU. Others have also developed alternative implementations of these Sun technologies, such as the GNU Compiler for Java (byte code compiler), GNU Class path (standard libraries), and Iced Tea-Web (browser plug-in for applets).

### **Advantages of java:**

- Purely Object oriented.
- Platform independent.
- It is dynamic, simple and robust.
- Easy to learn.
- Multithreaded. Secure.
- Wide variety of Application Programmer Interfaces (APIS).
- Excellent networking capability.

### **The java Platform:**

The Java platform is the name given to the computing platform from Oracle that helps users to run and develop Java applications. The platform does not just enable a user to run and develop Java application, but also features a wide variety of tools that can help developers work efficiently with the Java programming language

**The platform consists of two essential software's:**

- The Java Runtime Environment (JRE), which is needed to run Java applications and applets
- The Java Development Kit (JDK), which is needed to develop those Java applications and applets. If you have installed the JDK, you should know that it comes equipped with a JRE as well. So, for all the purposes of this book, you would only require the JDK.

### **Java Components:**

Java has two components those are

1. Java virtual machine (JVM).
2. Java Application Programmers Interface (API).

### **JVM**

A Java virtual machine (JVM) interprets compiled Java binary code (called byte code) for a computer's processor (or "hardware platform") so that it can perform a Java program's instructions. Java was designed to allow application programs to be built that could be run on any platform without having to be rewritten or recompiled by the programmer for each separate platform. A Java virtual machine makes this possible because it is aware of the specific instruction lengths and other particularities of the platform

### **API-**

An application programming interface (API) is a library of functions that Java provides for programmers for common tasks like file transfer, networking, and data structures.

- Java Program
- Java API
- Java Virtual Machine
- Hardware-Based Platform

### **Java in web:**

Java covers the whole application from server to client and back again, it provides many powerful technologies, it can be used to extend the browser, and it provides good security system. HTML: HTML stands for hypertext markup Language. It is very useful to make web pages and very easy to learn. Hypertext Markup file is a text file containing small markup tags. These marks up tags tell the browser how to display a web page. It has two types of extensions one is html and second is htm but both are used for html web pages. For hypertext markup language you can use the simple text editor for example; use notepad for writing your HTML code in the windows. If you are using Mac you can use simple text editor. HTML uses approach of what you see is what you get. You can also use to writetags other software that is FrontPage and Dreamweaver. In HTML character are surrounded by the tags. HTML tags come in pair. The beauty of this language is that it is not case sensitive. Every web page need HTML with it you cannot make the good web pages. And it is the base for every web page and used to display the text in the web pages there are some other latest version of HTML like DHTML which stands for dynamic html and is used to make the web pages more interactive

### **Features of HTML:**

- It is simple to understand and implement.
- HTML constructs are very easy to comprehend, and can be used effectively by anybody.
- HTML syntax is a worldwide standard.
- The methodology used by HTML to markup information is independent of its representation on a particular hardware or software architecture.
- It is not a programming language.
- And it is also not a description language

### **Java Server Pages (JSP):**

Java Server Pages (JSP) lets you separate the dynamic part of your pages from the static HTML. We simply write the regular html in the normal manner, using whatever Web-page-building tools you normally use. We then enclose the code for the c parts in special tags, most of which start with "<%" and end with %. We normally give your file a jsp extension, and typically install it in any ace you could place a normal Web page.

Although what you write often looks more a regular html file than a servlet, behind the scenes, the JSP page just gets converted to a normal servlet, with the static html simply being printed to the output stream associated with the servler's service method. This is normally done the first time the page is requested, and developers can simply request the

page themselves when first installing it if they want to be sure that the first real user doesn't get a momentary' delay when the JSP page is translated to a servlet and the servlet is compiled and loaded. Many Web servers let you define aliases that so that a URL that appears to reference an html file really points to a servlet or JSP page.

### **Advantages of jsp:**

- Separation of static from dynamic content.
- Write Once Run Anywhere.
- Recommended Web access layer for n-tier architecture.
- Completely leverages the Servlet API.
- Platform independent.
- Reuse of components and tag libraries.
- Encapsulation of functionality.
- They have a better performance and scalability than ordinary CGI scripts, because they are persistent in memory and multi-threaded.
- They have built in support for HTTP sessions, which makes application Programmingpossible.
- They have full access to Java Technology-Network awareness, threads and Databaseconnectivity-without the limitations of client side application applets.
- They are automatically recompiled when necessary.
- They exist in the ordinary Web server document space, no special URL mapping is required to address them.

### **How jsp works?**

#### **JSP pages exist in 3 forms or versions**

- JSP source code consists of text file with an extension of jsp and contains a mix of HTML template code, Java language statements and JSP directives and actions that describe how to generate a web page to service a particular request.
- Java source code: the jsp container translates the jsp source code into the source code for an equivalent Java Servlet as needed.
- Compiled Java class: Like any other Java class, the generated servlet code is compiled into byte-codes in a .class file ready to be loaded and executed.

### **JDBC does the following things:**

- Establish a connection with a database
- Send SQL statements
- Process the results.

### **The following code fragment gives a basic example of these three steps:**

```
Class.forName ("sun.jdbc.odbc.JdbcOdbcDriver");  
  
Connection con=DriverManager.getConnection("Jdbc:  
  
Odbc:dsnname");Statement stmt=con.createStatement();
```

### **Connection:**

A connection object represents a connection with a database. A connection session includes the SQL statements that are executed and the results that are returned over the connection. A single application can have one or more connections with a single database, or it can have connections with many different databases.

### **Opening a Connection:**

The standard way to establish a connection with a database is to call the method `DriverManager.getConnection`. This method takes a string containing URL. The Driver Manager class, referred to as the JDBC management layer, attempts to locate a driver that can connect to the database represented by Driver classes, and when the method `get Connection` is called, it checks with each driver in the list until it finds one that can connect using this URL to actually establish the connection.

### **Sending Statement:**

Once a connection is established, it is used to pass SQL statements to its underlying database. JDBC does not put any restrictions on the kinds of SQL statements that can be sent; this provides a great deal of flexibility, allowing the use of database-specific statements or even Non-SQL statements. It requires, however, that the user be responsible for making sure that the underlying database can process the SQL statements being sent and suffer the consequences if it cannot.

Tomcat organizes all these parts into a single directory structure for each web application.

**The flow that takes place is:**

- The user submits an HTML form,
- Tomcat finds the servlet based on the URL and the deployment descriptor, (web.xml) and passes the request to the servlet.
- The servlet computes a response.
- The servlet writes an HTML page containing the response.
- The servlet forwards the response to the JSP.
- The JSP embeds the response in an HTML page
- Tomcat returns the HTML page to the user.

**Status:**

Tomcat is available at the Jakarta binary downloads page. The Tomcat server is a Java based Web Application container that was created to run Servlets and Java Server Pages (JSP) in Web applications. As part of Apache's open source Jakarta project, it has nearly become the industry accepted standard reference. Implementation for both the Servlets and JSP API. Written by expert Servlets and JSP software architect and author James Goodwill, this column will feature introductory Web application development issues, Tomcat installation and configuration, deploying Web applications onto Tomcat, Struts and much more. Apache Tomcat (formerly under the Apache JakartaProject; Tomcat is now a top level project) is a web container developed at the Apache Software Foundation. Tomcat implements the servlet and the Java Server Pages (JSP) specifications from Sun Microsystems, providing an environment for Java code to run in cooperation with a web server. It adds tools for configuration and management but can also be configured by editing configuration files that are normally XML formatted. Because

Tomcat includes its own HTTP server internally, it is also considered a standalone web server, Tomcat is a web server that supports servlets and JSPs. Tomcat comes with the Jasper compiler that compiles JSPs into servlets. The Tomcat servlet engine is often used in combination with an Apache webserver or other web servers. Tomcat can also function as an independent web server

Earlier in its development, the perception existed that standalone Tomcat was only suitable for development environments and other environments with minimal requirements for speed and transaction handling. However, that perception no longer exists;

### **System Maintenance:**

The term "software maintenance" is used to describe the software engineering activities that occur following delivery of a software product to the customer. The maintenance phase of the software lifecycle is the time period in which a software product performs useful work. Maintenance activities involve making enhancement to software products, adapting products to new environments and correcting problems. Software product enhancement may involve providing new functional capabilities, improving user display and modes of interaction, and upgrading external documents.

Adaptation of software to a new environment may involve moving the software to a different machine. Problem correction involves modification and revalidation of software to correct errors. The enhancement of this project can be accomplished easily. That is, any new functional capabilities can be added to the project by simply including the new module in the homepage and giving a hyperlink to that module. Adaptation of this project to a new environment is also performed easily.

Even with the best quality assurance activities, it is likely that the customer will uncover defects in the software. Corrective maintenance changes the software to correct defects

## **Future Scope :**

- In future we can develop this software for multiple user at a time.
- We can make this existing single system into client and server base system.
- We can conduct exams in future by developing a driving license test.
- We can add new function to send machine generated messages for Echallans.
- Also we can collect online payments in future

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